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Manufacturers' Record.

RICHARD H. EDMONDS, President.
THOMAS P. GRASTY, Vice-President.

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COPY FOR ADVERTISEMENTS.

Advertising copy (changes or new advertisements) should reach us Saturday Morning to insure insertion in the issue of the following week.

For the first issue in the month we should receive copy by Friday Morning of the week preceding.

Advertisements of Southern localities offering special advantages for the location of manufacturing enterprises will be found on pages 54 and 55.

FOR FAIR PLAY.

Banking upon experience, observation and a level head, the Fall River Daily Herald, referring again to the agitation against Southern cotton mills, says:

Boiled down, the South finds this entire argument concentrated in two facts: One is that the capital of the North remains to be persuaded that legislative restrictions in the North are good for this section, and one is that there is no reason why a brand new industry should not avail itself of all of the opportunities of which an established industry has been possessed. When we sum up, in a controversy of this kind, we must not forget that we are not our brother's keeper. We of the North have interfered with the South as the South has never interfered with us. We have manufactured the cotton of the South into the yarn and cloth of the North, and the South has never told us that we should manufacture fifty-eight hours a week or sixty-six hours. She has had nothing to say regarding our State laws. But the moment the South begins to spin and weave her own raw material the North discusses hours of labor, the employment of children and other details with a view to bringing Southern labor conditions up to approved Northern standards. Is this fair play? That is a question that disturbs the Herald. If it is fair play, why do our parents do their level best to teach us to keep our hands and our tongues from the conduct of other people?

TEXAS MINERALS.

In their report to Governor Sayers the regents of the State University of Texas review the work done by the mineral survey of the university. The survey was established by the legislature March 28, 1901, and charged with the duty of conducting a survey of lands belonging to the several funds of the State and of collecting and distributing statistics of the mineral production of the State. Since May, 1901, when the survey started work, four important bulletins have been issued dealing with petroleum, sulphur, coal, lignite, as-

phalt rocks and quicksilver, and plans have been made for reports on cement and cement rocks, clays and the clay industry, salt, ores of gold, silver, lead and copper, building and ornamental stones, etc. It is expected that there will be published 4000 copies of each bulletin, and that four years will be required to complete the work as outlined at an expense of about \$15,000 annually. That is the lowest estimate of the expense, but the report suggests that the work could be done far better if \$25,000 a year were available; for not only would the publication of the several economic bulletins be possible, together with investigations along cognate lines, but a magnificent permanent collection of the minerals of the State could be collected. The question is whether the work is worth doing. Experience in other States makes an affirmative answer, and the practical energy shown by the Texas survey reinforces it.

BORN OF THE SOUTH.

Anybody having doubts about the ability of the South to produce and support a literary periodical of high grade should read the October number of the *Sewanee Review*, edited from the University of the South at Sewanee, Tenn. The contents of this number are thoroughly typical of the quarterly, including as they do papers by Marie Louise Whiting on "Robert Louis Stevenson," by Paul Elmer More on "Rhythm and the Science of Poetry," by C. O. Paulin on "The Naval Administration of the Southern States During the Revolution," by Gustavus M. Pinckney on "The Correspondence of John C. Calhoun," by Thomas F. Gailor on "The Rev. George Patterson, D. D.," by Kemper Bocock on "The Social Question and the Christian Answer," by G. B. Rose on "Two Dramas: D'Annunzio's 'Francesca da Rimini' and Maeterlinck's 'Monna Vanna,'" and by Albert T. McNeal and William E. Mikell on "The Future of the Democratic Party," in addition to the reviews of current publications and notes of more general character. But the most notable article is a sketch of the ten years of the *Review* closing with this volume. Into this retrospect are gathered a mass of facts telling of the origin and progress of the *Review*, of the contributors to its pages and of the various influences which have aided it in its successful effort to be a serious critical and literary journal. Supplementary to this sketch is a general index of thirty pages to the contents of the ten volumes. A perusal of that reveals the spirit which has prevailed in the conduct of the *Review* from the days of its founding by William P. Trent and B. Lawton Wiggins to the present editorship of John Bell Henneman and B. J. Ramage—a spirit so catholic and so lofty that it has made the *Review*, edited in the South and bearing the imprint of a leading New York publishing house, a periodical of distinct character for the whole country—as is natural.

COTTON MILLS AS SOCIAL BLESSINGS.

"Sociologists may theorize and misguided philanthropists may endow, but he who deals with things as they are is the real philosopher." The common-sense philosophy described and condensed in that sentence of Hon. R. B. Blackburn, a member of the Georgia legislature, has been applied and is being applied daily in the South by the managements of cotton mills. What the mills have done and are doing for the betterment of social conditions in the South, not only in giving employment to thousands of persons, but also in making opportunities for their real education, is strikingly shown in a comparison of statements in the *New York Sun* written contemporaneously and describing the condition of the class from which mill labor is recruited on the one hand, and on the other, the revolution in their lives wrought in centers of the textile industry.

What They Were.

A Tennessee correspondent, after describing the sturdy character of the Southern mountaineers and the difficulties under which they have existed for many years, writes:

The schools, for the most part, are poorly organized and deplorably taught. I think the average school term in this region is five months, and a child rarely attends more than two or three terms, merely long enough to learn to crudely read and write and cipher, and then is taken out to serve a lifetime in the kitchen or at the plough. A great percentage of the children do not attend school at all. * * * It is not book learning that these people need so much as it is instruction in the proper manner of living. They do not eat food, they eat feed; they do not consume provisions, they consume rations. With land upon which they could raise all kinds of vegetables, with every facility the heart could desire for the making of jellies, preserves and the sundry condiments which the New England housewife so delights in, their tables are spread chiefly with corn-bread and bacon and kraut, and in season potatoes, beans, cabbages and turnips cooked up atrociously in grease. One is irresistibly inclined to refer to their fare as fodder. Except in hog-killing time fresh meat rarely reaches their tables, and then only sparingly, as the greater amount is cured as bacon and ham for use throughout the year. Sugar is a rarity, the universal sorghum taking its place in the sweetening of cakes and pies, such as they are. Indeed, some of the pies are not sweetened at all, and their crusts—well, they should at least deserve a place in a list of specific gravities.

Even more crude and simple than their tables are their houses, a great number of which are every whit as primitive as in the days of the earliest settlements—unhewn logs thrown box-shape together and covered with boards split from the chestnut oak. Rude apertures are cut for windows, and the spaces between the logs stuffed with mud or rags, called chinking. In winter, and in summer often left open to the weather, so that one can stand on one side of a cabin and see what is taking place on the other side. Cooking stoves are a luxury, cooking in most cabins being done in the huge open fireplace by means of the kettle and Dutch oven or "skittle." The spinning-wheel and hand-loom are still prominently in evidence, although the general custom is to spin the yarn merely for knitting or to be sent to the factory for weaving. Social intercourse among them is for the most part stagnant and sterile. "Corn shuckings," "sorghum grindings" and "rackets" or dance parties are the most prominent diversions, but in the more enlightened communities box suppers, ice-cream sociables and like church festivals are frequent.

This state of crude and primitive existence, which in the foregoing I have barely outlined, is not a necessary imposition of local natural conditions, but a consequence of long seclusion from the outer world and its advancing civilization, together with an inherent indisposition to do more than is compelled by the most pressing necessities of life.

What They Are.

Another correspondent, touring the South, who found that the cotton factory has been an unspeakable blessing, too, for a class of whites in the lowlands and the foothills, who have been brought out of misery and squalor into plenty and comfortable homes and clothing, writing from Spartanburg, S. C., says:

The common schools for white children are attended by the children of the wealthiest as well as by those of people in the humblest circumstances—by the children of factory operatives and those of factory owners alike. It is an article of faith with the people here that the common school is the bulwark of America's social safety and highest development both material and moral, and they act upon that conviction and live up to it to the letter. But the educational work does not even stop here. The mill-owners are taking a hand in it on their own account. One of them said today:

"We appreciate fully the fact that a workman who is educated and intelligent is worth more to us at a higher rate of pay than is a workman at a lower scale of wages who is ignorant and unintelligent. We intend to go right on developing the industries here to their greatest productive capacity, and to that end we are endeavoring by all means in our power to educate our employees and their children so that we may have a higher type of hands in our factories, and the community a better type of citizens."

"You may put it down that our aim in encouraging education is a purely selfish one. We want educated employees at higher wages because they are better employees and their labor is more profitable to us. With that in view the board of directors of a mill near here, at a meeting which I attended today, voted unanimously to erect a fine school building close to the mill."

One of the mills near here recently erected a fine brick school building at a cost of \$6000, and the mills that are not already so provided are rapidly carrying out the same intent. All of these schools, of course, are entirely free to the children of the factory operatives, all that they have to furnish being the textbooks used.

A chapter by itself might be written on this branch of the subject of South Carolina's industrial development and the astonishing improvement it has wrought in the material and moral conditions of tens of thousands of poor white people of the State whose conditions were sad in very many instances prior to this recent awakening. It is not merely millions in dividends that the cotton mills of the South are turning out; it is the still greater wealth of a higher manhood and womanhood that they in the end will contribute to the country's resources.

Only those who know under what dire conditions the same people lived a few years ago who are now living in plenty and comfort and with a new world of light opening before them—only those who are able from their own observation to make this comparison can fully measure the blessing that manufacturers have brought upon this part of the country.

PROGRESS IN GEORGIA.

Comptroller-General Wm. A. Wright of Georgia, in his report to the governor, has compiled a mass of interesting and valuable figures showing the increase in property values in the State between 1870 and 1902. The assessed value of the whole taxable property of the State increased from \$234,959,548 to \$167,310,646. Some of the notable increases were as follows: Cotton factories from \$1,640,000 to \$21,491,371; iron works from \$295,640 to \$1,415,674; railroads from \$9,896,129 to \$55,212,573; bank capital from \$4,667,567 to \$15,442,458; city and town real estate from \$49,097,286 to \$122,672,195; lands from \$90,493,822 to \$121,799,018; live-stock from \$21,017,634 to \$25,192,836; farm implements from \$2,971,372 to \$6,896,301; household furniture from \$9,156,404 to \$16,611,652; merchandise from \$12,012,755 to \$24,104,341; and money, etc., from \$25,513,005 to \$33,916,679. Especially significant are the figures showing the progress made by the negroes as property-holders. That class of the population owns \$15,188,069 worth of assessed property, divided as follows: City or town real estate, \$4,389,422; lands, \$4,779,263; live-stock, \$2,985,811; tools and implements, \$652,583; household furniture, \$1,688,541; money, etc., \$96,538; merchandise, \$96,223; all other, \$499,668. While the values of all properties in the State have increased a little less than 100 per cent. since 1870, the values of negroes' property have increased a little more than 100 per cent. This fact is an evidence of the friendly relations between the whites and negroes of the State, manifested in other ways, and at the same time suggests greater achievements by the negroes, provided they may be relieved of that element among them which in indolence, vice and crime is a drain upon the whole community.

DETERMINED NEW ORLEANS.

The Times-Democrat of New Orleans, summarizing the business done at that port during the past year, shows a total railroad tonnage of 4,425,441 received and 2,231,183 shipped; total ocean tonnage entered and cleared, 5,176,542 in 2877 vessels; value of foreign exports, \$130,290,851; and of coastwise exports, \$66,113,420; value of foreign and coastwise imports, \$129,642,490; value of produce received from the interior, \$226,870,663; capital of factories in operation, \$46,003,604; and value of their output, \$63,514,505; and bank clearances, \$650,573,548. Gratifying as are these figures, they are not satisfactory to New Orleans. It is determined to do still better, and the forces which have been let loose recently through the Progressive Union and other agencies are assurances that the determination will be carried out.

POWER FOR INDUSTRY.

The city lighting plant of Montgomery, Ala., has been brought into touch with the power generated at Tallapoosa falls in the Tallapoosa river, twenty-five miles away. This fact is regarded as assuring to Montgomery a cheap and reliable power and as a promise of the city's industrial progress. Enough power is generated at the plant to operate the street railways and the street-lighting plant and to furnish a surplus for manufacturing, which may be increased according to the demand. The workings out of this undertaking will be watched with interest. It is a case of a city bringing to itself an industrial power to which it

could not go. There are other Southern communities with opportunities similar to these of which Montgomery has begun to avail itself. Will those opportunities be seized?

Shepperson's "Cotton Facts."

The twenty-seventh annual edition of that exceedingly valuable handbook, "Cotton Facts," published by Col. Alfred B. Shepperson of New York, the statistical expert in cotton, is issued this week. It brings the American and foreign statistics to the close of the season of 1901-1902, some figures being brought up to November 7. It gives the correct figures of United States port receipts (daily, weekly, monthly and for season), quantity brought into sight weekly and monthly, exports, stocks, spinners' takings, overland and plantation shipments, etc., for a series of years, together with Liverpool, New York and New Orleans prices; also all the salient points of the American, European, Egyptian and Indian movement, with many other matters of interest, including spindles and cotton consumption of United States, Europe, India and Japan, and full details of Liverpool cost, freight and insurance contracts for American cotton. The cotton acreage and production of each county and State according to the last census; United States Agricultural Department's estimates of acreage and crop condition, and an analysis of the methods of the Department; also United States Signal Service reports of temperature, rainfall and first frosts are given. Other features of special interest deal with the extensive irrigation works recently completed in Egypt, with Japanese cotton mills and with the Mexican cotton-boll weevil.

In Texan Oil Fields.

[Special Cor. Manufacturers' Record.] Beaumont, Texas, November 16.

A deal meaning that the Saratoga oil field is to be successfully developed has just been consummated between the Hooks brothers, pioneer citizens of Hardin county, and the Southern Pacific Railway, whereby the latter comes into possession of the cream of the Hardin county lands at a price said to be \$250,000. The Saratoga fields is the one that is said to have such valuable oil. The wells there are not gushers, but are steady 1000 and 2000-barrel producers, and the oil is variously placed at from \$1 to \$2 per barrel, which would seem to make it a more valuable field than Spindle Top even. This item is of vast importance to all the Texas fields, as meaning that the Southern Pacific will not longer depend upon Spindle Top for a supply, but will look to its own possessions. This big line sought to get in at Jennings, and again at Sour Lake. It merely goes to show the faith the wealthy institutions have in the Texas oil fields and the future of the State.

In the month of December there will be no less than three refineries started in full and complete operations that have not heretofore done anything. It is thought that when once it is shown that others beside the Guffey and the Standard interests can refine oil at a profit that the price will answer the influence and run up to a figure that will make further fortunes to the men who own the wells possible.

The shipments for the month are about in line with the previous month, but the prices are a trifle better than they were last month.

The pipe line from Sour Lake to Spindle Top will be completed next week, which means that the Sour Lake output will reach a market for the first time. Until now there has been absolutely no way to market the oil from there. It is eight miles from the railroad.

IN THE BIRMINGHAM DISTRICT.

Iron Shipments on Old Orders at Small Prices Nearing the End.

[Special Cor. Manufacturers' Record.] Birmingham, Ala., November 17.

There is some indication that the iron market is feeling the disposition of the money markets of the East to be tight, and it is learned that there is a noticeable decrease in inquiries for delivery the last half of next year. This was learned from Mr. C. A. Stillman, local manager for Rogers, Brown & Co., and a representative of one of the big corporations. This is not giving any trouble, for all the sales being made are a few to fill up gaps in the order-books for delivery before the first of next July.

There is a good prospect that the books of the companies shipping on old orders at small price will soon be cleared. The Tennessee Company has thirteen furnaces going now, which will go a long way toward relieving it of the handling of small-price contracts. If they can be kept running steadily there will be few of the old orders on the books the first of January. The five furnaces at Ensley made a record run in October, everything considered. The strike had much to do with holding them back, and it will be safe to say that there was not more than four going. As it was, 20,800 tons were made. If the run had been undisturbed it would have gone easily to 27,000, it is said. The output of the steel mill for the month was over 16,000 tons, which is regarded as exceedingly good; in fact, the company is feeling very happy over the records now being made by the steel mill, and expects to crowd the output up rapidly.

The Southern Railway is now owner of 120 acres of fine land at North Birmingham. The amount of the purchase price was \$50,000 cash. The land lies along the Southern tracks for a mile, and is about 950 feet wide. The sale is one of the largest ever made in that section of the county. It is generally believed that all the shops and roundhouses of the company will be moved from the city proper to the new location, thus relieving the station in the crowded district and giving the road more room for business.

Bids for the convicts of the State are to be opened in Montgomery next Wednesday, and Governor Jelks has said that if the State does not get a price that seems adequate the convicts will not be worked in the mines.

A delegation of citizens of Huntsville met President Smith of the Louisville & Nashville here last week and presented him a petition to build a line from Hoobs Island, in Blount county, to Huntsville. R. E. Pettus, president of the Huntsville Chamber of Commerce, headed the delegation.

A number of the stockholders of the Sloss-Sheffield Steel & Iron Co. were in the district this week looking over the properties of the company. They saw the local holdings and at Florence and Sheffield. Those in the party are Joseph Bryan, first vice-president, Richmond, Va.; W. H. Godby, H. O. Seixas, W. E. Strong, J. J. Nestell, Richard Mortimer, New York; R. C. Matthews, Toronto, and Warren Soper, Ottawa, Canada. They were shown around by President Mayben and Secretary McQueen. The Canadians, who have recently become stockholders, are very much pleased with what they have found.

The Oxmoor furnace of the Tennessee Company, which was fired up last week, is making iron.

The scheme of W. H. Morris and others to build a cold-air plant at this point has fallen through for the time being because some points in the franchise insisted on by the city council are not to be carried

out. It will be taken up later, it is given out.

The Seaboard Air Line has asked a franchise to parallel the Southern through the city of Woodlawn. This is indicative of the determination of the road to enter through the Irondale gap.

The steel mill at Ensley has begun the manufacture of steel rail. It is one of the best-equipped mills in the country. A new engine for the operation of the steel mill at Ensley has been heard from. The purchase price and cost of installing will reach \$100,000. This will give the mill ability to largely increase output.

There is a hope that the car famine will soon be bettered, if not abated. Some of the roads have already gotten in new engine power and cars. H. W. L.

FLORIDA FARM PROFITS.

Authoritative Figures of Trucking in Manatee County.

Facts are convincing Northern and Western farmers that the South is the proper place for them. Among the most patent facts are those showing what may be realized from an application of intelligence and industry to Southern soil. Census figures tell that while the average value of Southern farm lands with improvements is less than \$10 an acre in the South and more than \$27 an acre in the rest of the country, the value of products of Southern farms, after deducting the value of products fed to stock and the amount of money paid for labor and for fertilizers, averages 25 per cent. on the investment, while the average for the whole country is but 16.2 per cent. This general exhibit for the South becomes more interesting when details are studied, when the experiences of neighborhoods or of individuals are analyzed.

An opportunity to do this for Manatee county, Florida, is given in figures quoted by Mr. J. W. White of Portsmouth, Va., industrial agent of the Seaboard Air Line Railway. He shows that during the season ended June 30 last the shipments of citrus fruits from Manatee county amounted to 299,161 boxes, 77,400 boxes being shipped from Palmetto, and the vegetable shipments amounted to 446,562 crates, of which 182,600 crates went from Palmetto. In addition, the county shipped 1700 barrels of turpentine, 4500 barrels of resin, 313 tons of fish and six tons of oysters. The profits accruing to truck-growers in this section of Florida appear in the figures compiled by Mr. White from statements of eleven representative growers, who cultivated 136 acres of land in egg plants, tomatoes, celery, cabbage, cucumber peas, squash and cantaloupes and lettuce. The total net profits were \$42,298.75.

Mr. White also cites the experience of Mr. J. N. McLean upon an eight-acre tract. Mr. McLean begins each season by planting cauliflower, lettuce and celery in October and November. These are harvested in February and March, and are followed immediately by tomatoes, and after the tomatoes by cowpeas in June. Last season he realized from tomatoes \$1700, from celery \$1200, from lettuce \$900, from cauliflower \$285, a total of \$4085. His expenses for crate material, fertilizer, horse feed, labor and incidentals were \$1485, leaving a net profit of \$2600, or \$325 an acre.

For Paper Pulp.

Mr. C. A. Michaels of Marion, Ind., writes that he and Messrs. R. J. Spencer and Fred W. Willson have organized a company to manufacture in the South paper pulp from canebrake cane. They are looking for a location, and have visited several towns in Mississippi.

AMERICAN BANKERS' ASSOCIATION.

Significant Features of Its Convention at New Orleans.

[Special Correspondence Manufacturers' Record.]

New Orleans, La., November 18.

While the convention of the American Bankers' Association in this city last week may be said to have made history only in so far as the association committed itself to some sort of currency reform—and what will finally be recommended is now wholly problematical—there were numerous features of the meeting which are of interest and of importance to the South. It is important and gratifying, in the first place, that there was almost double the attendance of former conventions, indicating the desire and pleasure of these men of finance to visit the foremost city of the far South and to acquaint themselves with the business conditions which exist in this section, about which interest has never been so universally great as at the present time.

There were delivered on the floor of the convention a number of able addresses, mostly according to program. Without question the one of most striking boldness and greatest significance, the one which is now causing newspaper and individual comment the country over because of the advanced position it takes, for one identified with large corporate interests, was the speech of Mr. John Skelton Williams, banker, trust-company officer and railroad president, of Richmond, Va.

The address of Congressman Fowler, author of the Fowler banking bill, on assets currency and branch banking, was one of the ablest addresses of the session, and provoked earnest discussion inside and outside the convention hall. That the majority of delegates in attendance were not yet prepared to take the step in advance urged in this address was manifested by votes taken on various resolutions and motions offered during debate.

The necessity for a more elastic currency was, however, very generally conceded, and the matter was finally referred to a committee of seven, to be appointed by the new president, Mr. Caldwell Hardy of the Norfolk National Bank, Norfolk, Va. It is understood that Mr. Hardy will announce his selection at an early day, and it is expected that recommendations may be formulated for presentation to Congress early in the next session.

The entertainment given to visitors by the city of New Orleans was a notable feature of the occasion. Always gracious in its hospitality, it made no difference in the quality of the entertainment given that two other conventions were in session in New Orleans at the same time—a rather trying test of the capacities of the city and admittedly a greater strain than should have been imposed. However, it gave the hotel men a chance to show what they could do under stress, and they acquitted themselves most creditably. Especially must this be said of the New St. Charles, the bankers' headquarters, where numerous receptions were held during the week. It was a matter of frequent comment that this hotel and the way it is conducted by Mr. Blakely have done more than any other single feature to give New Orleans its present great popularity as a convention city.

An incident of decided interest in the week's events was the visit to New Orleans and to the convention of a party of forty leading business men of Chicago, who were in the South for a two weeks' "missionary" tour. It is significant of the strongly aggressive spirit of Chicago business that this trip was planned to head off the confessedly great inroads being

made by St. Louis business men upon Chicago's trade in the South and Southwest. To give the highest possible standing to the delegation, it was decreed that no one but presidents or heads of establishments should be permitted to make the trip, and then they went after and secured the presence of the general managers and high officials of several important Southwestern railroads. So it was rather a regal crowd all around. And it will hardly be surprising if the trip bears fruit unless St. Louis applies some sort of "counter-irritant."

Some side trips were made by the visiting bankers, and much attention was given to a study of the commercial and industrial growth of New Orleans and adjacent regions. With so much of a solid and substantial character to engage their interest and to gain their approval, it is the belief that the visit of the bankers to the South will be of material and decided benefit to the section.

Incident to the cropping out on the convention floor of pessimistic echoes of Mr. Vanderlip's recent warning cry to go slow, Mr. Richard H. Edmonds, editor of the Manufacturers' Record, and a member of the convention as representative of the International Trust Co. of Baltimore, took occasion to point out the total lack of any real reason for a breakdown in this country's prosperity. His presentation of the case as it appeared in an interview in the New Orleans States is given herewith, as well as the speeches of Messrs. Williams and Fowler.

ALBERT PHENIX.

The Province of Capital.

Mr. John Skelton Williams, chairman of the trust-company section of the American Bankers' Association, prefaced his striking speech on trusts with a graceful and eloquent tribute to the people of New Orleans for the reception accorded and for the part New Orleans has played in history. Then coming to commercial matters, Mr. Williams said:

"The government reports show that the past fifteen years have seen the foreign commerce of this city practically double itself, both as to exports and imports, and it is indicative of the wonderful growth of this section that in the value of exports New Orleans stands next to New York and ahead of Philadelphia, Baltimore, Boston and San Francisco.

"In the matter of a favorable trade balance, that is to say, excess of exports over imports, New Orleans outranks every other port in the United States, including New York, and it is an interesting fact to note that the exports from the city of New Orleans for the past year exceeded in value the total exports of all the ports of the great empire of China, with its 400,000,000 people, for whose trade all the nations of the world are now so eagerly scrambling.

"Your steady growth as a manufacturing city has been remarkable. In art and letters you are conspicuous. Nearly 100 flourishing schools and colleges provide for the intellectual development of your people, while twice as many churches minister to their religious wants.

"All of your institutions, whether of charity, of learning, of business or of festivity, bespeak the wisdom, energy, excellence and grace of your manhood.

"You have done much in the past, and are destined to do more.

"I have the honor to represent here one of the means developed by modern neces-

sities and devised by modern thought and experience which will aid your growth and enlarge your achievements—the trust company. The very name 'trust' has been made odious to the American people. Yet it is the trust company that has made the impossible possible. It has gathered the capital of many investors, and with aggregated and concentrated power it has done what no individual enterprise or fortune could do. It has collected and held money in vast masses, and made it effective for tremendous achievements.

"The trust company as an institution has in a comparatively short period, from a small beginning, advanced swiftly, until it has become today the most powerful engine of modern finance.

"The total resources of trust companies in the United States in 1880 were stated at only \$125,000,000. The reports of the Treasury Department at the present time show that the resources of the trust companies of the United States have now reached the enormous sum of \$2,000,000,000, which is more than the entire stocks of money, including gold, silver and paper money, of the great German empire and the empire of Russia combined.

"From 1880 to 1902 the capital stock of these trust companies, according to the records of the comptroller of the currency, has grown from \$18,000,000 to \$180,000,000, while their surplus of \$6,000,000 in 1880 has increased twenty-five fold, to \$150,000,000, in 1902.

"The records also show that the number of trust companies has increased from 30 in 1880 to more than 400 today. There are more than 4300 national banks now in operation in the United States. The individual deposits of these banks in July, 1902, were \$3,098,000,000; the individual deposits of trust companies at the same time were \$1,525,000,000, one-half as great as the deposits of national banks, notwithstanding the fact that there are ten times as many national banks as there are trust companies. The average amount of individual deposits of national banks was \$720,000; the average amount of individual deposits of trust companies was \$3,650,000, or five times as great as the average individual deposits of national banks.

"The individual deposits of our trust companies today are seventeen times as great as they were in 1880, and it is interesting to note that the increase in the capital stock and the increase in surplus from 1885 to 1902 amounts to more than the entire capital stock and surplus of all trust companies in the United States as late as 1890, whilst the increase in individual deposits in the past seven years of \$1,000,000,000 is just three times as much as their total individual deposits amounted to in 1890.

"In the year 1880 the individual deposits of national banks, State banks and trust companies aggregated \$1,183,000,000, of which 74 per cent. was held by the national banks, 18 per cent. by State banks and 8 per cent. by trust companies. In the year 1902 the individual deposits of these three classes of banking institutions had grown to \$6,322,000,000. The proportion held by national banks had declined from 74 per cent. to 49 per cent., the proportion held by State banks had increased from 18 per cent. to 26 per cent., whilst the proportion held by trust companies had increased from only 8 per cent. in 1880 to more than 24 per cent. of the total in 1902. In other words, whilst the records show that the individual deposits of trust companies have increased 1600 per cent. since 1880, the increase in individual deposits of the national banks has been only 271 per cent., and the increase in individual deposits of State banks 713 per cent.

"It is a gratification to the trust-company section to know that nearly all of the trust companies of the United States are now enrolled as members of the American Bankers' Association. Your members are scattered through forty-three States and Territories, and we also have one valued member in the far-off Sandwich Islands.

"There was a net gain during the year of eighty-five new members, and as there are now but few trust companies not members of the association, our increase in numbers in the future will come principally from new trust companies yet to be organized.

"The trust company in this country is now attracting to its service men of the most distinguished attainments, leaders in thought and action, recognized captains of industry. Presiding officers of trust companies in New York city at the present time include one former Vice-President of the United States and two former Secretaries of the Treasury.

"I recognize, as every thinking man must, that there is a limit beyond which the combination of capital should not go—a point at which the power of concentrated capital should be halted. To the accomplishments of wise and proper economies, to the development of efficiency in service and the promotion of the public convenience and comfort, combinations and aggregations of capital are right, and should be encouraged. When they bend their energies to the stifling of competition and undertake to become monopolies, they should be met and checked, and must be, if our institutions are to be maintained and we are to remain a free people.

"As one identified with trust-company and banking interests and with railroad interests, and as chairman of the trust-company section of the American Bankers' Association, I say to you that the power of money ought to be restrained and the power of corporations properly controlled. I believe that the common sense of the American people can be relied on to discern the danger point and to draw the line there and announce the edict: 'So far shalt thou come and no further, and here shall thy proud waves be stayed.'

"We are interested alike as taxpayers, as citizens, as workers. Those of us who undertake to despoil our fellows today may ourselves be the subjects of injustice and the helpless victims of some new and mighty combination tomorrow. At this moment it is charged that the commerce and prosperity of the entire South are threatened with the blight and the oppression of vast railway associations, which are attempting the placing of the control of the entire system of railway transportation in the keeping of one man or set of men and at the mercy of one interest, which may be guided by this impulse or that, which may demand that our business shall be developed or depressed. Whilst it is pleasant to be assured, as we are, that there are still lines of transportation beyond the reach of any monopoly, yet it is well for us to know that even this vast power can be dealt with, and the people may be trusted to deal with it.

"As you here and your neighbors above made levees and limits for the mighty Mississippi, and directed it into usefulness and restrained its ravages, so this power of capital can be checked and governed and guided by the strength of the people. Monopoly, oppressive, or threatening to be so, invites its own overthrow. No man, no trust, no accumulation of capital or combination of interests, however stupendous, can stand against the wrath or justly grounded suspicions of the American people, or against the organized re-

sentment or resistance of any State of this great Union.

"The business of the corporation, of the trust company, of the bank, of every combination of capital and brains and enterprise is to give the public good value for fair returns. The moment any of us go beyond that and attempt to extort from the public unjust tribute or extravagant dividends or profit on unfairly inflated issues of securities or to exercise unjust discrimination, we cease to become business men, and become the highwaymen in fact, if not in law. When we cease to become the servants and partners and associates of the people from whom we draw our living in return for our investments of money and expenditure of thought and energy, and undertake to be the masters of the people, and despots, demanding blackmail from them, we forfeit our claim to respect and sympathy and invite vengeance. We incite ignorance to seek redress by violence, and intellect to devise methods for our destruction.

"It is our duty to recognize our responsibilities and obligations to the great public, on which all of us depend for our living, to respect its rights, to offer it always fair value for what it pays us, to encourage and accept honest competition as the best stimulant of our strength, and offering the most accurate measure of our manhood.

"Your trust companies here have enabled you to do things you could not have done without them. As your people, all through your long history as a community, have proved their ability to deal with every emergency of war and every problem of peace, they can be relied on, in common with their fellow-citizens of the United States, to deal with the aggressions of accumulated capital at the proper time and in the proper and conservative way. I mean by 'conservative,' preserving and maintaining, and destroying no rights and no values.

"Again I thank you in behalf of all the members of this association for the welcome which I know comes from hospitable hearts and expresses the feeling of a generous people of a well-established and tried city.

"I am glad to have had the opportunity to say here what I know is in the minds of my colleagues and associates.

"The real business men and builders of the country—those who represent actual values and substantial investments and real money—want to be creators, and not despots; helpers and associates, and not tyrants or plunderers; legitimate competitors for business, and not monopolists or masters."

Elasticity in Banking.

Hon. Charles N. Fowler of New Jersey said in part:

"Whatever might happen to a person if he were to make the remark, certainly here I am safe in saying that bankers are good fellows—all good fellows; they are the best men in the country—but I want to say to you that you have come here not as bankers alone. First of all, every person here who comes here representing a bank is a moral being. Secondly, you are here as a citizen, a lover of your country, a patriot. Lastly, and least of all, each of all is here as a banker seeking your self-interests. No one of you at home, by conferring with his conscience, would waive his manhood on the one side and his citizenship for his position as banker. Yesterday the president of the Bankers' Association made one or two remarks that might possibly mislead the unthinking, and inasmuch that I have discovered that many of you are here somewhat, if not largely, for a good time, when you are having a good time you are not thinking all the while. My friend, Mr. Herrick,

took occasion to remark that 'there is in this country no postal savings department to make the national government the creditor of thrifty wage-earners and others of small means. Here deposits in savings banks form a very large part of the money used by the banks of discount.' Mr. Herrick has the reputation of being the president of a very large savings bank—he tells me with \$41,000,000 of deposits, and that he carries about \$4,000,000 of reserve or cash. If you should take his remarks for what they might seem to mean, you would think that he has \$40,000,000 of money—but he has not—and he would hate mightily to have people call for \$40,000,000 during the coming week. There is a vast difference between property, capital, money and currency. When one makes a deposit of a check for \$1,000,000 with some bank, he has not turned over any money; he has turned over the title to \$1,000,000 worth of property, that is all. Do not get these terms mixed.

"Now, another thought. Money may be currency, but right currency is never money. Money is the touchstone, or should be, of your currency. Currency ought to be of two kinds—the currency of commerce, the checks and the drafts, and the currency of trade, a right bank currency, a note of the bank.

"Another thought—for as the wood-chopper in the forest first clears away the underbrush before he strikes at the root of the tree, so I want to remove some of the apparent entanglements that Mr. Herrick would seem to have thrown in my pathway. He alluded in his speech to the fact that there had been great failures in Australia, where the banking system was Scotch, both as to currency and branches. That is true, but it was because those banks forgot that their business was a commercial business, and went into the real-estate business. The fact that they failed only proves that no good bank, dealing with the commerce of a country, will engage in a real-estate business. Mr. Herrick's statement was as if I were to say: John Doe has cattle on his farm, therefore he has no horses.

"Another remark. He said we must not deal with fads. Let me assure the gentleman that I am not dealing with fads or fancy, but with facts—facts that the fiat of economic law have carved out.

"Another assurance that he gave you yesterday was that the gold mines of Johannesburg are now being worked, and that there is no reason to be anxious for the future. Let me say that it would be utterly immaterial to this country whether those mines produced \$1,000,000 or \$10,000,000 a month or \$50,000,000 a month unless this country has a way of getting the gold. I assert that there is not today in the United States a commercial or economic reserve against our vast commercial credits. We are dealing with something more than fads and fancies. I recently used this language: 'It may be assumed, without any fear of successful contradiction, that the United States is absolutely without a natural and responsible guardian of an adequate reserve for our commercial credits. Indeed, a step further may be taken, and the assertion confidently made that there is not, economically speaking, a commercial reserve in the United States at all. On the other hand, there is no doubt that there is now more gold in the United States than would be required to constitute such a commercial reserve. But this fact would not protect us against a panic this fall.'—(I used this language last June, and you are having your panic now)—or even next week, if, for some unforeseen reason, a startling or considerable amount of gold should be taken away from us.' A fear that it will be called for now is resting

upon this country. 'The same subtle powers and unseen and unknowable forces that kept and brought only \$879,000,000 gold here from 1879 to 1902, notwithstanding the facts that the production of gold in the United States for that period amounted to \$995,000,000, and the balance of trade in our favor for the same years was \$4,844,000,000, may silently but surely take away \$500,000,000 more, or all we have, simply because there is no self-interested and legally required power to protect and prevent when the drafts come. Is the American memory so short that it does not recall that we had \$332,000,000 of gold in the Treasury in September, 1888, and yet were compelled to put into that seemingly bottomless pit \$294,000,000 more by February, 1896, making a total of \$626,000,000 of gold coin that practically went into and out of the Treasury by compulsion during the short space of seven years?

"In the light of this experience, is there much ground for jubilation over the fact that there is in the Treasury today gold amounting to nearly \$600,000,000, when we recall the fact that we do not have the slightest control over its movements, and that a still larger amount proved as evanescent and as elusive as a midsummer dream between the years of 1889 and 1896? With all our superabundance of gold and matchless prosperity it is certain that we are living—nay, slumbering—in a fool's paradise, and may almost any moment be suddenly and rudely awakened. We are somewhat awakened now, because our financial system is only a fair weather craft, wholly unsuited to carry in a violent commercial storm.

"In the years following 1870, and down to 1902, the balance of trade against Great Britain was \$26,000,000. Yet England had always as much gold as she wanted. During those same years France had a balance of trade against her of \$40,000,000. Yet she got all the gold she wanted. During the same years Germany had a balance of trade of more than \$4,000,000,000. Yet Germany got what gold she wanted. Yet none of these countries produced any gold to speak of. During the past five years—a most wonderful period in the human race in this country—the balance of trade in favor of the United States was \$2,700,000,000, and we have produced a vast amount of gold, between \$300,000,000 and \$400,000,000, making over \$3,000,000,000 all told.

"Now if there was anything in the fallacy of the balance of trade, we ought to have, in New York or in the United States, \$3,000,000,000 more than we had in 1896, when we had \$696,000,000. But how much have we? We have added just \$500,000,000; we have now \$1,200,000,000. So that there is due from us to Europe \$2,000,000,000, yet we are told by bankers in New York, who know the situation best, that we have on the other side anywhere from \$1,000,000,000 to \$300,000,000 of loans coming due within the next two or three or four months. How are you going to stop the gold from going, when all Europe can go to the Treasury of the United States with a bag and get it without price? If the burden were placed upon the bankers of the United States, as it is upon the Bank of England and the Bank of France, you would place the price of gold every night in the rate of interest; it would control the movement of gold. But there is no such condition in this country, and there will be no such condition until the United States notes are retired and that burden thrown upon the banks.

"Never was there greater need than we now have of a national system. We have no system now. It is catch as catch can and go as you please. The financial sys-

tem should be built upon principles as unvarying and immutable as the law of gravitation. Eighty millions of the most intelligent, sagacious and protective people in the world converting their talent and toil until more than \$80,000,000,000 of products every year, which in their swift and ceaseless changing from mine and mill and from forest and farm to the ever-increasing wants of a grandly advancing nation send the exchanges bounding beyond the \$100,000,000,000 mark, are entitled to, need, and must have something more and other than tentative monetary conditions, subject every two years to a party vote, and dependent almost every hour on the caprice or fancy of a Secretary of the Treasury.

"The infinite and almost immeasurable commerce of this country should be grounded upon and anchored to the world's standard of value, and yet not a single transaction, however small or however great, of the countless trades involved in the whole \$118,000,000,000 of exchanges must now be proved in gold coin. Indeed, nowhere does gold bear a direct compulsory relation to the business of the country.

"The currency tools of smaller trade, as well as those of the larger commerce, should spring into being with each transaction and return to their source upon the completion of their mission. These instruments of trade should always be equal to the needs of business, and always as good as gold, because convertible into gold upon the demand of the holder. The banks of the country should prove the soundness of their credits by daily gold-coin redemptions. Our banking system should be such as to make every dollar of money or credit available at the points where most needed, and that without charge or discount, if we are to have a mechanism of the highest utility, greatest economy, undoubted stability and the most perfect efficiency.

"Now, with the commerce of this country founded upon a gold basis, we must then proceed to devise a most economical and efficient mechanism for carrying on this business. It is a sort of superstructure, and it cannot be constructed until the foundation is laid. Let me say, by way of anticipating what I know is in the mind of many a person here, that I shall not urge or recommend a currency which has not stood the test of 200 years in England, 100 years in France, and for sixty years of the first history of this country and thirty-five years in Germany. So that the man who thinks that I may be alluding to something that is running through his mind, that his father now has 'red dog,' or any other kind of dog money, is utterly mistaken; for I want to say here and now that though through every part of the United States there was, during the history of this country down to 1860—a period of seventy-five years—tests made of a right currency, in no instance was there an opprobrious term used with regard to it.

"Now, I leave this opportunity open. I challenge any man in this audience—he may take until tomorrow to meet the challenge—to point out a single instance in the history of the world where a true credit currency, with proper reservation by law, currently redeemed in kind, ever failed. A bank may have failed, but the system never failed anywhere at any time.

"Now, let me put a question to you as a banker, each one taking it to himself. A man comes to your bank and desires to borrow \$1000. To eliminate all question of credit, because we want to agree upon as many things as possible, he says that he has \$1000 government bonds to secure the loan. When you ask how he will have it he says, 'place it to my credit.' You

give him a check book and a pass book. He goes out on the street. Tomorrow the same man returns and says he wants to borrow \$1000 upon the same kind of security. You loan it to him. You ask how he will have it. He says 'place it to my credit,' and starting to leave he bethinks himself that the use he desires to make of it will require some better credit than his own, and therefore he draws ten checks of \$100 each, and turns to the cashier and asks him to certify the ten checks. I will ask any banker here if there is the slightest difference to the bank in these two cases. Is there? No, of course there is not. The next morning the same man comes back and desires to borrow \$1000 upon the same kind of security. You ask him how he will have it. Bethinking himself he says 'I will take bank notes'—the mere promises to pay of the bank. Is there the slightest difference between the account subject to check, the certified checks of the cashier and the bank notes that you have given the man? The bank is liable for \$1000 in each case, and that is all there is to it. Supposing the banks, as now, had the right to issue 100 per cent. of such currency, do you believe that such an issue would be dangerous? Do you believe that it would amount to inflation? Don't take my statement for it, but let me call your attention to experience. Mark this: France has a permissible issue of \$1,000,000,000 of notes, but the amount that France has out is only \$814,000,000. Germany could issue \$464,000,000, but has only out \$332,000,000. Scotland could issue \$148,000,000, but has out only \$40,000,000. The First United States Bank could have issued \$10,000,000, but its highest point was \$5,000,000. The Second United States Bank could have issued \$50,000,000, but its highest point was \$23,000,000. The Bank of Indiana could have issued \$10,000,000, but it had out only \$4,000,000; the Bank of Iowa \$2,000,000, and only had out \$1,000,000. In New England the Suffolk system, of six different States with 500 banks, could have issued \$122,000,000, and only had out \$44,000,000 at the end of its period. The Canadian banks have the right to issue \$65,000,000, and the highest point reached last year was \$57,000,000."

Mr. Fowler showed by diagrams the elasticity of the currency of Canada, Scotland and the United States. The diagram for Canada showed that the currency came out of the banks each year only once, namely, when the crops were moved, and then it went back again. In Scotland the diagram showed that it came out of the banks twice a year, namely, the 1st of May and the 1st of November, and then to meet the demands of trade, after which it went back to its normal condition. The diagram for the United States was almost a straight line, showing that no currency came out of the banks at any time. He added:

"You will see in this line for the United States a little bend. That means that the bankers were speculating in bonds. Every time there was a chance to speculate in bonds you will see a little bend in the currency line in our system."

"Let no man go away from this hall without a distinct idea of the difference between currency and money. We have \$3,000,000,000 of money and \$1,500,000,000 of currency."

"I am for an international banking system for this government. I want to see in every market of the world a national bank. The prophetic William McKinley saw the necessity of this, as we knew by the great speech he made at Buffalo. Soon it will be every sixth man in this country who will be working on commodities that will be sold beyond the borders of this country. I want to see the time

when New York, and not London, will be the clearing-house of the world. I want to see the American eagle stamped on the majority of the gold of commerce. American production and consumption do not exist for the railroad, but the railroads exist for them. We are fighting the battle of higher wages and cheaper commodities in this country. You rail at a trades-union that meets in Shreveport or New York today because it says that only 100 bricks may be laid in the same length of time where formerly 200 were laid, and you say that such action is robbery, and that the laborers are ruining their manhood. That is true. But what are you bankers doing when you lend money at home at 8 per cent. which you get abroad at 5 per cent.?"

"Gentlemen, the banking system is not growing and keeping abreast with the times as it should. I want to say just a word about Mr. Ridgely's address yesterday, in which he deprecated a branch banking system. He said: 'The majority of the people are against it.' I would like to know how he knows that. True, many bankers are against it. A banker said to me the other day, 'Don't you know that 5000 bankers are against you on this subject?' I said, 'I do, but I know that, on the other hand, there are 5,000,000 other people with me.'"

Elements of Prosperity.

Mr. Richard H. Edmonds, editor of the Manufacturers' Record, in his interview discussing the business outlook of the country, said:

"It seems to me that Mr. Vanderbilt and other bankers who have lately been uttering warnings of possible financial trouble by reason of too much activity in business have overlooked some important facts. They have based their warnings on overspeculation, but overspeculation is possibly not as great a factor in comparison with our business interests as is generally claimed. The real business interests of the country, the producing power of our farmers and our manufacturers, are so much vaster than the speculative operations of Wall street—using Wall street as a term to indicate the stock speculative element of the whole country—that the banker in the money center is sometimes prone to take a narrow view of the expanding trade of the United States, and of the real basis of our business activity."

"Possibly these bankers may be correct; possibly we may have disturbing financial conditions which will frighten capital, but may it not be possible that the very cry of danger so often repeated will, like the cry of 'fire' in a crowded theater, cause a stampede to the loss of many lives, when there was no real danger had cool heads controlled the situation? We are told that our exports have declined and our imports increased, and that this is a dangerous symptom; we are told that, instead of heavy exports of steel and iron of three years ago, we are now importing steel and iron, and that this indicates the culmination of our great prosperity in these interests. It is difficult to understand how men of such supposed business acumen can for a moment express such views. Three to five years ago our iron interests were still, by reason of the disastrous conditions brought about by free-silver agitation, so depressed in price that our manufacturers were forced, in self-protection, to push our pig-iron and steel rails into foreign markets. The home demand was then so much less than the production that we exported about 1,000,000 tons a year; but this was sold at a very small profit. If we sold \$100,000,000 worth of such merchandise at little or no profit, it would be absurd to say that the bringing of this \$100,000,000 to our country added that much to our

wealth, and yet that is the logical position of many of the views expressed on the subject."

"At present the demand for iron and steel is so great that it is impossible for our makers to supply it, and we are compelled to purchase abroad at the rate of probably 1,000,000 tons this year; but that is not a sign of bad times; it simply shows that we are enjoying such a degree of prosperity, of consuming power, that though our furnaces and rail mills and locomotive works are crowded to their utmost capacity, it is impossible for them to meet the consumptive demand. We are now making pig-iron at the rate of 50,000 tons a day, or 18,000,000 tons a year, and instead of having in stock 500,000 to 1,000,000 tons of unsold iron, as we have usually carried, the entire stock in the United States is only about 50,000 tons, or scarcely one day's consumption. But for the fact that foreign countries have been able to add to our own production by heavy exports to us during the last few months, many foundries and machine shops would have been forced to close for weeks or months for lack of material. Never before in our history has such a condition prevailed. Even now every week sees foundries in every part of the country closing for a day or two at a time because of their inability to secure pig-iron. Every furnace in the country making iron for this trade is besieged with telegrams begging for the immediate shipment of some order on which there has been a delay, or for the privilege of buying, almost without regard to price, even a few tons, in order to keep from shutting down."

"The steel-rail mills are so oversold that it is almost impossible to buy rails for delivery within the next ten months, and a number of orders have been placed in Europe because of the inability to buy at home. Locomotive works are behind time on orders, and have more contracts booked than they can fill between now and 1904. The aggregate capacity of all the locomotive works in the United States is only about 4000 a year, and the Pennsylvania Railroad alone has recently placed orders for 600, or one-seventh of the total output of the country, for next year's delivery. Every railroad in the country is so overcrowded with business, both passenger and freight, that it is impossible to promptly handle the traffic. It is not, as in former years, a fight to secure traffic, but it is now an unceasing struggle for traffic managers to find the cars and the locomotives to handle that which is offered. Almost every locomotive in the country is doing double duty, and so great is the urgency that between trains passenger locomotives are pressed, even for a few hours at a time, into freight service. It is no longer possible to send locomotives to the shops to be overhauled and repaired as soon as needed, for so incessant is the cry from the transportation men that hardly a locomotive has a chance to cool from one trip to the next. The fact is, the whole railroad interests of the country are staggered by the overwhelming volume of traffic offered—this, too, in the face of the fact that last year we had the shortest corn crop for ten years or more, the total yield having been only 1,500,000,000 bushels, whereas this year it is about 2,500,000,000 bushels, or an amount equal to about 30,000,000 tons more than the crop of last year."

"From Maine to Texas, from the Gulf to the Pacific, without a single exception, the story comes of the prosperity of farmers, of manufacturers and of merchants. The bankers at this convention, so far as I have been able to learn, without exception, are enthusiastic in their statements of the phenomenal real prosperity

of every section and of every class of people. Never before has labor been so well employed, never before have the farmers of the West or of the South and of the Pacific coast alike been so prosperous at the same time. Never in our history has there been such universal activity and prosperity in every branch of the iron, steel and machinery interests. Lumbering, like other industries, was never more prosperous, nor, broadly speaking for the whole country, was the activity ever greater."

"Moreover, we are told that this era of high prices will be disastrous. It is true that natural conditions, and not speculation, nor even trusts, have brought about high prices in iron, in foodstuffs and in many manufactured products. Temporarily these prices are injurious to the consumer, but on the whole this is offset in part by the more general employment of the people and the greater prosperity of the farmers, of railroads and of manufacturers than we have ever seen in the past. But natural causes which have brought about these high prices must gradually bring about in most cases lower prices. In foodstuffs, where we have high prices largely by reason of last year's corn shortage, we shall have somewhat lower prices by reason of the enormous increase in our corn crop this year over last. In pig-iron the present high prices would tend to restrict consumption if they should continue a year or two, but the increasing productive capacity of the country, by reason of the construction of new furnaces, will probably bring about a readjustment without reducing prices to an unprofitable figure, at least to such low prices as prevailed a few years ago, when we were compelled to dump our surplus iron on foreign markets without regard to price or profit. According to some of the arguments recently promulgated, it would be more profitable to the country to sell our iron abroad, even at a loss, than to find a full consumptive demand at home at a profit. Since all the iron and steel we are making is going into immediate consumption, and all the lumber that is being produced is needed for construction work, while everywhere the call for dwellings, for cars and for other things into which lumber enters is greater than the supply, there is nowhere a sign of overproduction. In one or two branches of the steel trade and in tinplates a readjustment of prices is now taking place. Instead of being an unfavorable sign, this is an advantage, since prices in these, as in pig-iron, have been somewhat too high, but these high prices are temporary. They have not been brought about by speculation, but by conditions forced upon the trade through the unprecedented consumptive requirements of the country. In taking the position that we have been growing too rapidly, as some have done, and that we are thus in danger, may it not be that they have failed to fully grasp the recuperative power of a country of 80,000,000 people with such potentialities for the development of business, the employment of the people and the creation of wealth as no other nation, even as no other continent, has ever dreamed of, now that we have been freed, as we were a few years ago, from the great incubus of an unsettled monetary standard, which for years had halted our progress? May they not have failed to give full appreciation to the fact that with an increase of population of 15,000,000 or more people every ten years we have an increase in agricultural products of over \$2,000,000,000 a year, compared with 1890, and about \$5,000,000,000 a year in manufactures and mining, compared with the same year. Ten years ago the value of our agricultural products was, in round

numbers, \$9,000,000,000 a year, and of our mineral and manufactured products \$10,000,000,000, a total of \$13,000,000,000. Now our farms are yielding over \$5,000,000,000 and our mines and factories about \$15,000,000,000, a total of \$20,000,000,000 a year. Thus the output of these two interests is now annually exceeding by \$7,000,000,000 their output of ten years ago, a gain of nearly 60 per cent., while population only increased about 25 per cent. Shall our farmers be urged to produce less? Shall our mines and factories be advised to curtail production, though consumers are eager to take their output even more rapidly than it can be provided? Do not these facts indicate the soundness of our business conditions, despite the overcapitalization of many organizations which have been foisted upon the public, and the speculative craze which was thus created in a comparatively limited circle? Do they not indicate that our abounding prosperity is so firmly rooted that we have been able, without seriously disturbing business, to absorb these overcapitalized corporations and stand the undue speculation coincident with their flotation? Has not our very prosperity enabled most of these concerns to put themselves on a very much sounder basis than when first organized, and are they not, therefore, far less dangerous to us now than they were then? Shall our true prosperity be jeopardized and our material progress checked by a false alarm, simply because the time has come to call some halt upon the wild speculation whose very existence is largely due to the encouragement given to it by some of the great financial institutions of the country?

"Then what boots the loss of a few million dollars in the volume of our exports or a few million dollars in the increase of our imports, when our whole foreign trade is less than 5 per cent. of the trade of the country, when this decrease on the one side and increase on the other are due to our very prosperity. England, France and Germany import vastly more than they export, but nobody ever imagines that this means poverty to either of these countries, nor do we hear of their bankers becoming unduly alarmed at such temporary and comparatively trifling changes in foreign trade as we have recently had. Might it not be better for our bankers, while discouraging the speculation and overcapitalization gathered around some of them in the great financial centers of the country, to recognize the fact that if our prosperity should break down when based on such conditions as now prevail, it will be due to their inability to measure up to the opportunity and responsibility which rests upon them as the controlling powers in financing the business interests of the country."

The Officers.

The officers of the association were selected as follows:

President—Caldwell Hardy, Norfolk.
First Vice-President—F. G. Bigelow, Milwaukee.
Chairman Executive Council—E. F. Swinney, Kansas City.
Treasurer—George F. Orde, Chicago.
Secretary—James R. Branch, New York.
Assistant Secretary—W. G. Fitzwilson, New York.

EXECUTIVE COUNCIL.

Three years:

John Skelton Williams, Richmond.
W. T. Fenton, Chicago.
David Sloan, Lonaconing, Md.
Arthur Reynolds, Des Moines.
James T. Hayden, New Orleans.
A. H. Wiggins, New York.
Charles L. Farrell, Indianapolis.
A. V. Lane, Dallas.

Luther Drake, Omaha.
A. A. Crane, Minneapolis.
Two years:
John L. Hamilton, Hoopeston, Ill.
J. J. Sullivan, Cleveland.
Ralph Van Vechten, Cedar Rapids.
J. R. McAllister, Philadelphia.
Joseph G. Brown, Raleigh, N. C.
P. C. Kauffman, Tacoma, Wash.
James M. Donald, New York.
E. F. Swinney, Kansas City.
F. H. Fries, Winston, N. C.
Wm. G. Mather, Cleveland.
One year:
Wm. M. Hill, Richmond.
James M. Willock, Pittsburg.
W. L. Moyer, New York.
C. A. Pugley, Peekskill, N. Y.
Kenneth Clark, St. Paul.
G. W. Bolton, Alexandria, La.
J. P. Huston, Marshall, Mo.
F. W. Hayes, Detroit.
E. L. Meyer, Hutchinson, Kan.
John T. Dismukes, St. Augustine, Fla.

VICE-PRESIDENTS FOR STATES.

Alabama—L. B. Farley.
Alaska—I. G. Held.
Arizona—Frank C. Murphy.
Arkansas—W. Y. Foster.
California—J. M. Elliott.
Colorado—J. C. Mitchell.
Connecticut—Frank D. Hallett.
Delaware—R. H. Williams.
District of Columbia—John I. Edson.
Florida—R. H. Barnett.
Georgia—James T. Anderson.
Idaho—C. W. Moore.
Illinois—Andrew Russell.
Indiana—John W. Perrin.
Indian Territory—E. D. Wims.
Iowa—T. J. Fletcher.
Kansas—Scott Hopkins.
Kentucky—Oscar Ferby.
Louisiana—J. W. Castles.
Maine—J. E. Wendren.
Maryland—William Ingle.
Massachusetts—E. A. Presbrey.
Michigan—Lucius B. Lilley.
Minnesota—George Pease.
Mississippi—J. J. White.
Missouri—Graham Levy.
Montana—George L. Ramsey.
Nebraska—Chas. F. McCrew.
Nevada—G. W. Maples.
New Hampshire—Wm. F. Thayer.
New Jersey—Wm. K. Hurff.
New Mexico—J. W. Carter.
New York—B. W. Wellington.
North Carolina—W. E. Borden.
North Dakota—R. S. Lewis.
Ohio—A. S. Frazier.
Oklahoma—W. S. Kieser.
Oregon—Benj. I. Cohen.
Pennsylvania—C. M. W. Keck.
Rhode Island—Amos G. Nichols.
South Carolina—W. A. Law.
South Dakota—Harry R. Dennis.
Tennessee—W. A. Sadd.
Texas—M. B. Loyd.
Utah—L. S. Hills.
Vermont—R. C. Abell.
Virginia—John D. Horsley.
Washington—James D. Hoge.
West Virginia—I. Q. Dickenson.
Wisconsin—H. D. Smith.
Wyoming—T. A. Coosruff.
Hawaii—C. Brown.

MACHINERY DEALERS.

Interesting Meeting of the Southern Association at Memphis.

[Special Cor. Manufacturers' Record.]
Memphis, Tenn., November 14.

The special meeting of the Southern Supply and Machinery Dealers' Association, which began its sessions in the Gayoso Hotel here last Wednesday, adjourned yesterday, was eminently successful. The convention was called to order by Mr. C. B. Jenkins of the Cameron & Barkley Company of Charleston, S. C., who was elected president of the

association at the convention held last spring at Charleston.

After prayer by the Rev. Dr. Davenport and the singing of "America" by all the members standing, President Jenkins made an address of welcome, in which he paid a tribute to Memphis, its achievements and its possibilities. In speaking of the growth of this city he said the statistics showed the population in 1830 to be 36; in 1840, 1799; in 1850, 8841; in 1860, 22,643; in 1870, 40,226. In 1880, owing to three visitations of yellow fever since the previous census, the population dropped to 33,592, but in 1890 it was 64,495 and in 1900 it reached 102,320.

At the close of the president's remarks Mr. C. B. Carter, the secretary-treasurer, introduced Hon. Josiah Patterson, who delivered a brief address. He said he represented Mayor Williams, who had been unavoidably detained at the City Hall. Colonel Patterson thanked the machinery men for selecting Memphis for their meeting-place, and said he hoped the results would be so great as to warrant a return visit. In the absence of Mr. Geo. V. Denny of Savannah, who was to address the convention, Mr. J. A. Reichman of Memphis spoke. Mr. W. A. Mix of the Dodge Pulley Co., Mishawauka, Ind., made a brief reply to Mr. Reichman, and he made quite a decided hit.

The president presented an excellent report of what had been accomplished during the short existence of this body, and he made many valuable suggestions as to the future. In summing up he said: "We have a bright future ahead of us, so let our watchword be Success." Half a dozen impromptu speeches were made before the noon recess, all touching on the good of the association, after which adjournment was taken until the afternoon, when the following program was followed: Reading of minutes of Charleston convention, reports of the secretary-treasurer, of the transportation committee, of the grievance committee, of the manufacturers' committee and of the executive committee, and the appointment of special committees, communications, miscellaneous business and opening of question box.

The entertainment feature for the first evening was a theater party.

Thursday morning the subject "How Can Manufacturers Most Economically Distribute Their Product" was discussed fully by Messrs. N. A. Gladding of E. C. Atkins & Co., Indianapolis, Ind., and Mr. Albert Weber of the Crane Company, Chicago, Ill. The subject "Reciprocity" was ably treated by Mr. Peter E. Blow of the Southern Brass & Iron Co. of Knoxville, Tenn.; "Advantages and Disadvantages of Quantity Prices," by Mr. L. J. Lomasney of the Peerless Rubber Manufacturing Co., New York city. "The Outlook for the Approaching Year" and "Will Present Range of Prices Probably Prevail" occupied the attention of Mr. John J. Voorhees of the Voorhees Rubber Manufacturing Co., Jersey City, and Chas. F. Aaron of the New York Leather Belting Co., New York. "The Effects of Prices on Consumption" was the subject of an address by Mr. S. Milnor Price of the Henry Walke Company, Norfolk, Va., and also by Mr. C. R. Houston of the Houston, Stanwood & Gamble Co. of Cincinnati, Ohio. The entertainment feature for Thursday was a banquet at the Gayoso Hotel. The last day of the session was taken up in executive sessions discussing practical measures to be adopted to make the conduct of business more profitable, and with reports from special committees. The association will hold its annual convention at New Orleans in April.

The objects of the Southern Supply and

Machinery Dealers' Association are to bring the supply and machinery dealers of the Southern States into closer relations, so that the trade conditions of their respective lines may be brought more in harmony in all sections. The association also contemplates bringing the dealers and manufacturers closer together. This organization was only perfected in April of this year at a preliminary meeting held at Charleston, S. C. A special meeting was thought advisable at this time to further perfect the organization and look into the trade conditions for the winter season, which is usually heavy with supply and machinery concerns. This association grew out of the Southern Hardware Jobbers' Association, of which Mr. Carter is also secretary-treasurer, and the two associations are in a certain sense akin. The officers are:

President, C. B. Jenkins, the Cameron & Barkley Co., Charleston, S. C.

First vice-president, Levin Jones, Southern Railway Supply Co., Richmond, Va.

Second vice-president, Geo. R. Lombard, Lombard Iron Works & Supply Co., Augusta, Ga.

Secretary-treasurer, C. B. Carter, Knoxville, Tenn.

The following are members of the association.

Alabama.

Anniston Supply Co., Anniston.

Florida.

John G. Christopher, Jacksonville.

Georgia.

Atlanta Supply Co., Atlanta.

E. C. Atkins & Co., Atlanta.

Cotton States Belting & Supply Co., Atlanta.

Lombard Iron Works & Supply Co., Augusta.

J. S. Schofield's Sons Co., Macon.

Georgia Supply Co., Savannah.

Maryland.

Carey Machinery & Supply Co., Baltimore.

The Fairbanks Co., Baltimore.

J. D. Mallory, Baltimore.

Tennessee.

James & Co., Chattanooga.

Southern Brass & Iron Co., Knoxville.

E. C. Atkins & Co., Memphis.

J. H. Collin & Co., Memphis.

Livermore Iron & Supply Co., Memphis.

The Reichman-Crosby Co., Memphis.

Nashville Machine Works, Nashville.

North Carolina.

Hyman Supply Co., New Berne.

N. S. Fulford Hardware Co., Washington.

South Carolina.

The Bailey-Lobby Co., Charleston.

The Cameron & Barkley Co., Charleston.

Virginia.

Smith-Courtney Co., Richmond.

Southern Railway Supply Co., Richmond.

Mayer & Co., Norfolk.

The Henry Walke Co., Norfolk.

Louisiana.

Gibbens & Stream, New Orleans.

Rustman-Hardman Supply Co., Ruston.

Texas.

Briggs Machinery & Supply Co., Dallas.

Howard Smith Co., Houston.

Mr. S. P. Browning of the Ohio Valley Pulley Works, Maysville, Ky.; Mr. D. J. Campbell of the Dodge Manufacturing Co., and M. W. Mix of Mishawauka, Ind.; W. R. Patton of the Saginaw Manufacturing Co. of Saginaw, Mich., and C. R. Houston of the Houston, Stanwood & Gamble Co. of Cincinnati, Ohio, and quite a large number of other leading manufacturers were in attendance at the convention.

I. S. FIELD.

SPLENDID GULFPORT: THE NEW SOUTHERN HARBOR.

The Center of an Investment of Ten Million Dollars.

[Special Correspondence Manufacturers' Record.]

Gulfport, Miss., November 17.

Improvements of a most extraordinary and remarkable character, representing, all told, an investment of some \$10,000,000, are so far advanced toward completion here that a few months more will see the finishing strokes. So unostentatiously has the great work been done that even those who follow up developments in the South have no adequate conception of the vast importance of the work now practically accomplished.

A splendid new deep-water harbor has been thrown open to the commerce of the world, and yet even the United States hydrographic office has no record of the depth of the channel. A new seaport of inevitably great importance has been created, and yet those who are even able to point it out on the map are few and far between. The railroad, which is an important part of this enterprise, is laid for 250 miles through the heart of the greatest long-leaf pine section in the South, where the cleared lands are adapted to all kinds of agricultural operations and may be had at from \$10 to \$15 an acre, with enough timber left for fuel and farm purposes, and yet the country is practically without agriculturists.

As a matter of fact, here are pioneer conditions, with every facility for the most modern operations; here are the beginnings of things, the foundations of a small new world, with the unoccupied opportunities which exist in primitive times, while at the same time there are present the means of reaching the highest development, not through slow and difficult stages, but with the first efforts that are put forth.

Gulfport, which is at the intersection of the Louisville & Nashville and the Gulf & Ship Island roads, on the 1st of January a straggling hamlet of 1000 souls, has all of 3500 people now, and is fast being transformed into a place of the most comfortable habitation. One of the finest resort hotels on the coast is under construction, and Gulfport is now the county-seat of Harrison county. It is to be made a commercial and industrial center, and, having been given the finest harbor along the coast, it is certain to become a shipping point of constantly increasing importance.

The Gulf & Ship Island Railroad, largely the property of Capt. J. T. Jones, a wealthy manufacturer, oil operator and capitalist living in Buffalo, N. Y., has built a pier from the shore at Gulfport more than one mile out into the Mississippi sound, and, starting with twenty-four feet of water alongside the wharf, has dredged a channel 310 feet wide and above twenty-two feet deep for seven miles out into the Ship Island harbor and the deep waters of the Gulf. An anchorage basin half a mile long and one-quarter of a mile wide, with piers and slips at the head, is under construction, and the whole improvement will be fully completed within the next few months. As it is, ocean-going vessels now tie up at the wharf, the first steamship ever seen in Gulfport, the *Hirundo*, Captain Nelson, Liverpool, having arrived, amid the booming of cannon, on Saturday of last week, and the *Aureole* being due to arrive on the 20th.

No doubt is entertained that the channel will be as permanent as a ditch dug in clay. It has withstood without injury one exceedingly hard storm, and it is declared an impossibility for it to fill up

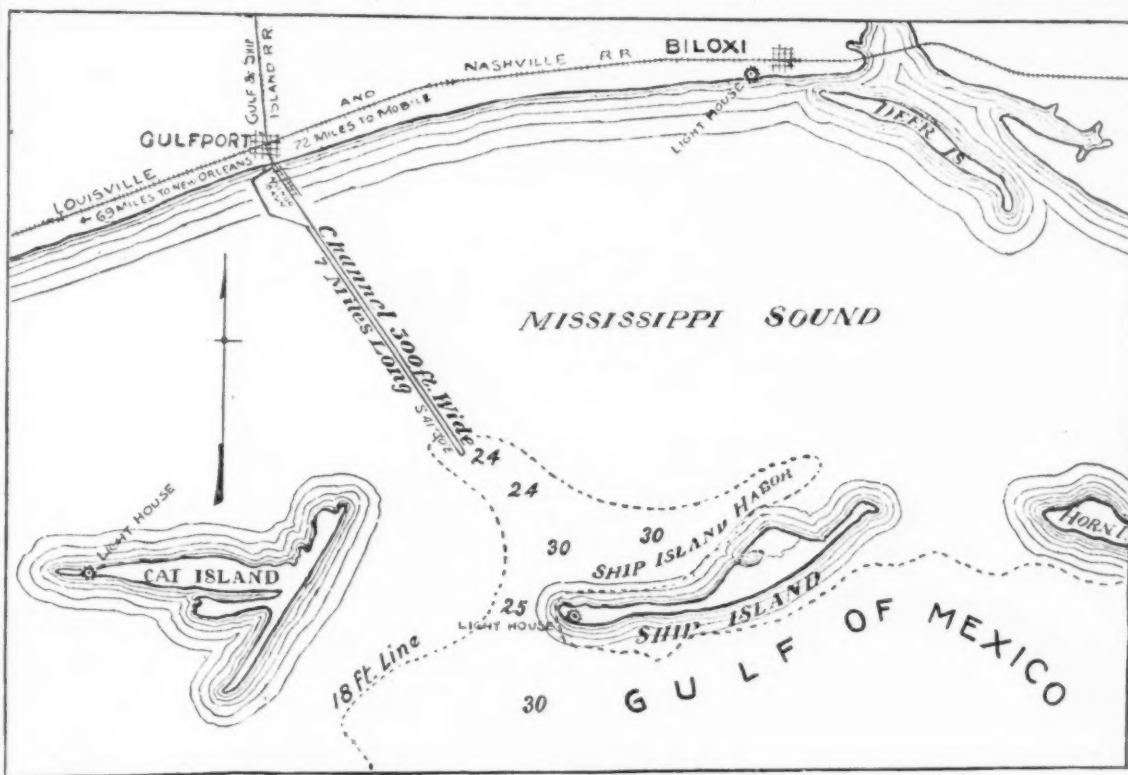
or for the sides to cave in. The bottom of Mississippi sound is filled with sediment from the Mississippi river overflows, which, before the settlement of the Lower Mississippi and the construction of levees, used to sweep into Lake Pontchartrain, out through the Rigolets, and overspread Mississippi sound. The deposits thus made through cycles of time have become so compact that they will stand cutting into almost perpendicularly, and are absolutely permanent at an angle of 45 degrees. The overflows from the river having entirely ceased, and there being no shifting sands to contend with, it is declared no other channel on the coast can be maintained with anything like equal certainty and at practically no further expense.

Just how much this enterprise is going to mean to the South it is difficult for

islands from nine to twelve miles from the main shore, to which cargoes were lightered. Besides the expensive lighterage charges, these island harbors offered little or no protection during a storm, and there were times during the year when no boats would attempt to tie up. After the organization of the Gulf & Ship Island Railroad it was proposed to the government that an appropriation for dredging a channel between Gulfport and Ship Island harbor be made. The government engineer with jurisdiction in this district reported adversely, not deeming that possible traffic would justify the expense. An agreement was effected, however, by which the government was to contribute \$150,000 toward the work under certain conditions. Two years ago or so the Gulf & Ship Island road was reorganized, and Captain Jones assumed more nearly personal supervision of the enterprise. He took up his temporary residence in Gulfport and started in to push work in every direction. He is putting his railroad in the best possible physical condition, 75-pound rails being the standard, and the roadbed compares favorably with that of

the highest attainable standard. Some idea of the earnings of a lumber line are indicated in the figures given in the annual report of this road. It is stated that the earnings from freight during the year ending June 30, 1902, amounted to \$4350 per mile of road, the total freight earnings being about \$1,092,000. The total net earnings per mile of road, everything included, were \$1804. The average freight trainload was 164 tons.

It has been declared that a timber road will carry as great a tonnage of freight in one year as would be hauled of cotton in fifty years. But while it might appear that a timber road is every year diminishing its revenue possibilities with the destruction of the forests, it is historically true that the settlement of the country provides a business which continues the profits of the road without diminution—frequently they are greater than ever before—and the number of logging roads that have seen an evolution into a full-fledged railroad or branch line is very considerable. So while Captain Jones is living up to the full measure of his possibilities in the way of marketing the tim-



GULFPORT, MISS., SHOWING CHANNEL.

even the enthusiast to foretell. That Gulfport contains remarkable possibilities, however, is clearly indicated in the conditions that exist. The world's fine harbors are not overplentiful, and they are not made to order in a day or a year, nor without the expenditure of vast treasure. Even if the possibilities of another Gulfport existed on Mississippi sound, which is denied, it is inconceivable that another Captain Jones will be found—a man who is able and willing to pour out money by the millions in such a purely pioneering enterprise. And especially true is this, since Gulfport is now an accomplished fact. Nobody ever did, and probably no other man ever would, undertake so gigantic an enterprise, but now that Gulfport has made the great and substantial start she has, it may be assumed as incontestible that no other Gulf port will ever rise up to challenge her supremacy.

With a normal depth of water of but ten to twelve feet in the sound, vessels loading with the lumber which is shipped in such large quantities from the mouths of the rivers all along the sound have been compelled to tie up at one of the many

any railroad in the South. The main line of the road runs from Gulfport to Jackson, the capital of Mississippi, 160 miles, and there are branches from Maxie to Columbia and from Saratoga to Laurel, making a total mileage of 251 miles. The entire distance is through the long-leaf pine belt, unsurpassed anywhere, the timber cutting an average of 8000 feet to the acre. Three-fourths of the timber of this area is still standing. By buying up large tracts of land at strategic points and throwing out logging roads at various places the management has secured control of an area which it is estimated will require from twenty to thirty years to cut over, although the capacity of the ninety-four mills along the line is some 3,000,000 feet a day, and one of the mills alone clears over eighty acres every operating day. The transportation of lumber is famously profitable. Gulf & Ship Island flat cars are forty feet long, and have a capacity of 80,000 pounds, and they are usually loaded to their capacity. Not even the Pennsylvania has more substantial rolling stock than this road, it being characteristic of Captain Jones that every feature of his improvements here is up to

ber along his line, and is protecting his timber territory for future operations, he is looking forward to the settlement of the denuded lands with farmers, stock-raisers and fruit-growers, and has full confidence that the prosperity of his road will be even greater than at present when all this vast territory is brought into cultivation, and when the towns along the line—there is an average of one to every three and one-half miles already—have begun to be sustained by industries and by agriculture, instead of by the timber industry, as they are almost totally today. There are some quite large cities, 7000 or over, along the line, but they are mainly of a few hundred inhabitants, and at present about everything they live on is shipped in to them.

Systematic plans for the settlement of the territory after the timber is out are being made under Captain Jones' direction. The soil here is a sandy loam, with a clay subsoil, and it is admirably adapted to all kinds of farming operations. Contrary to the popular belief, Mississippi is one of the healthiest States in the Union. The average annual death rate per 1000 population for the United States is 15.09.

Colorado, which is one of the healthiest in the list, shows 13.10, while Mississippi's rate—these are all government statistics—is but 12.89. Massachusetts is 18.59. Except in the lowlands of the delta country, along the western border, Mississippi is high and rolling, and malaria is unknown, while the temperature compares favorably with that of places several hundred miles to the north. There are no State statistics provided by Mississippi. In this respect it is one of the most backward States of the Union, and it has been overlooked to a puzzling extent by homeseekers from the North and elsewhere. In the influx of outsiders which the South is now seeing, Mississippi will without doubt soon cease to be passed by, and it may be regarded by many as an unmixed blessing that primitive conditions so far prevail, and that opportunities for building from the foundation so generally exist.

Out of 903,918 tons of freight originating on the line or received from other carriers during the year, 736,844 tons, or 81.52 per cent., were of lumber, and 18,240 were of naval stores, while there were 12,466 tons of cotton. The large proportion of forest products will doubtless continue for some years, although an ever-increasing tonnage of agricultural products and manufactures is expected. Fruit and truck growers' associations are being organized along the line, the opportunities for peaches, small fruits, truck farming, etc., being conspicuously attractive. Sheep and cattle are thrifty here, and corn and cane and grasses do well, forty bushels to the acre being a very common yield from a field of corn. Large colonization plans are now being formed, and homeseekers' excursions are to be run from places in the North.

Efforts are being made as well to develop the resources of the country in an industrial way. In the entire 100x160 miles of territory controlled by the Gulf & Ship Island Railroad, there is scarcely an industry of any kind outside of saw and planing mills. The freight records of the road show that there are from eighteen to twenty carloads of furniture shipped in every thirty days, and yet there is not even a sash and door factory along the line or in Gulfport. Enough oak, poplar, gum and magnolia are found along the line to keep numerous factories employed, to say nothing of the uses to which this finest of yellow pine might be put. Then there are fine kaolin beds in abundance; excellent brick clay beginning five miles north of Gulfport and now just beginning to be utilized. There are vast quantities of iron deposits in the vicinity of Saratoga, now used by the road for concreting, and which have never been tested, but are believed to have commercial value as an iron proposition. There is an abundance of gravel, superior for ballasting and having the quality of cementing, becoming very hard and compact, and is especially valuable for streets.

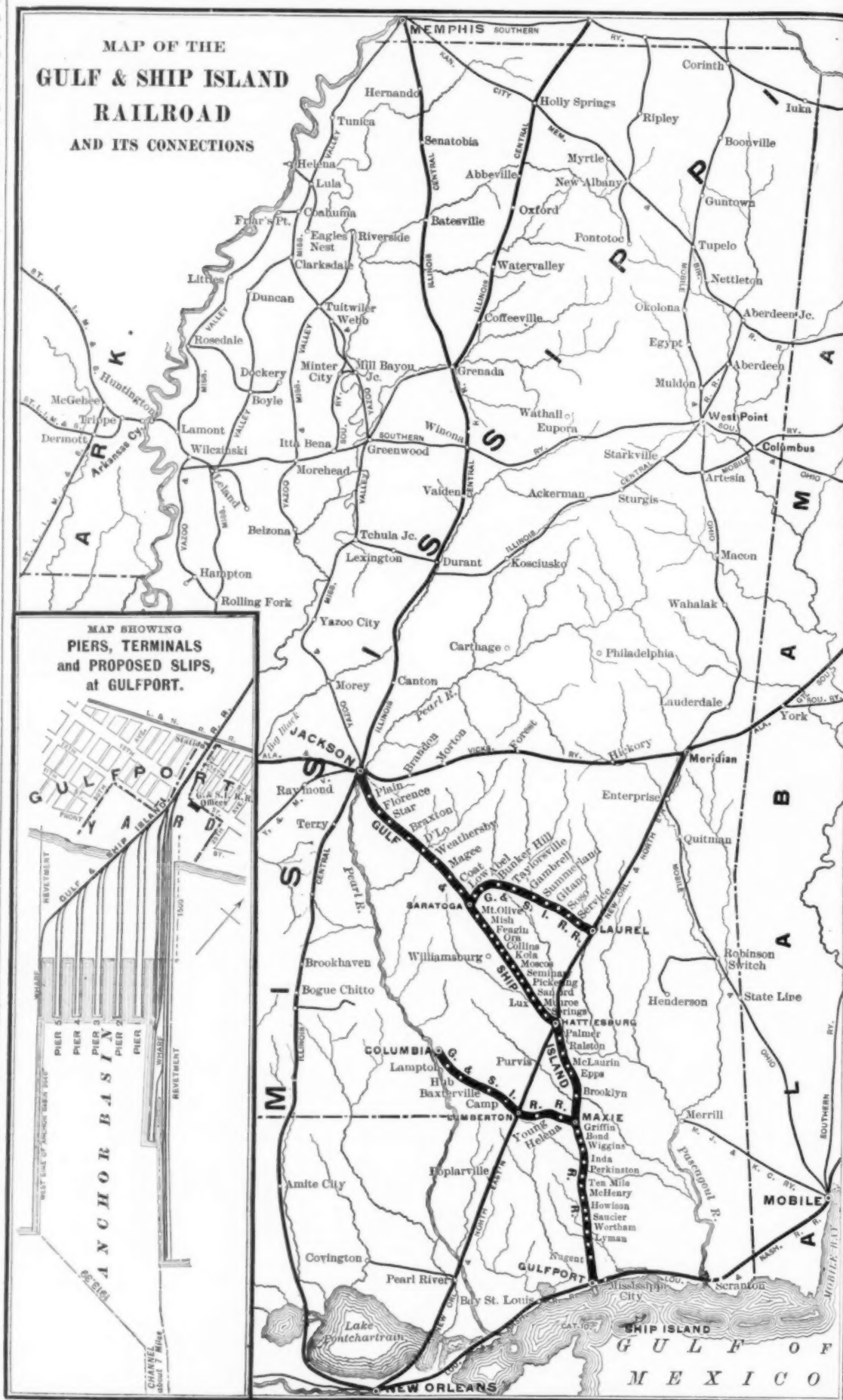
Out of the sand on the shore at Gulfport a practically excellent sandstone brick can be made by the German process. A test was recently made at the only factory of the kind in America, located at Michigan City, Ind., and it was pronounced superior to the Lake Michigan product. They can be made to sell at \$2.75 a thousand, and will stand the fire-and-water test as well as a pressure of 2000 pounds.

It is the purpose of the management to develop these and every other kind of industry possible at Gulfport and along the line. The industrial and immigration agent of the road is making a special effort to interest manufacturers in the line of furniture, foundry and machine shops, doors, sash and blinds; a cotton compress,

oil mills, fertilizer factories, canneries, etc. So urgent is the need of the "first aids to the immigrant" that there is not even a steam laundry in Gulfport now, and the industrial and immigration agent is furthermore attempting to secure a de-

Captain Jones will attract such general attention, as soon as the knowledge of his achievements has become known, that the primary needs of Gulfport will speedily be supplied. The shipping world will spread the news of the splendid port he

in the South while pursuing his investigations. Whatever can be done to make Gulfport attractive and important, that Captain Jones is doing. His hotel, to be known as the Great Southern, is to have 235 rooms, with 50 or more bathrooms,



This map is published through the courtesy of the New York Financial Chronicle.

partment store, and suggests that it is a good time now for wholesale dry-goods and grocery men to cast an eye on Gulfport.

But the work that has been done by

has created here, and the magnificent new hotel, to be opened in June, will make it possible for the seeker after opportunities for investment to enjoy a sojourn at one of the finest caravansaries

and is to have electric lights, steam heat and every possible comfort and convenience. It will be three stories in height, fronting on the sound, and will be beautifully envired with gravel walks and

turf, with trees, palms, fountains and flowers. It will have a main hall 100x40 feet, and will be as much a thing of beauty as a house of comfort. No superior construction work has been seen in a Southern-resort hotel. The heaviest of heart-pine flooring is used throughout, and the floors and siding will be sheathed with asbestos paper. Metal lathing will be used, and in every feature protection from fire will be provided. It will be red-tile roofed, and the sides will be rough weatherboarded and stained. The house alone will cost about \$300,000. Retaining control of the house himself, Captain Jones will entrust the management to Mr. Cyrus H. Clarke, a hotel man of wide experience, whose fame in the South is based on his successful conduct of the Mexican Gulf Hotel at Pass Christian. A by no means unimportant feature of life at the hotel will be the fact that near the grounds the mile pier of the railroad begins. No finer boardwalk for a moonlight stroll exists on earth, and at the ocean end there will be a pavilion, with music and palms, where the pleasant hours may be whiled away beneath the softest of Southern skies. Lest the walk prove too much of an exertion for some of the strollers, an electric railroad is to be built from the shore to the end of the pier.

Other improvements besides the hotel and pier now being made by Captain Jones include an office building for the railroad company, which is of mill construction and most substantial and pleasing in appearance, the brick exterior being covered with a white composition of attractive form. A slightly bank and office building is also under way, as well as a power-house, which will furnish electricity for the city as well as the hotel, and will contain the boilers, the refrigerating plant for the hotel, etc. Mr. Thomas Sully, architect for the New St. Charles, the Hennen Building and other conspicuous modern structures at New Orleans and throughout the South, was employed by Captain Jones as architect and superintendent of all these Gulfport buildings, and was literally given carte blanche to work out the best results possible. Including the docks, the pier and the dredging, which will cost about \$1,500,000, the perfectly-equipped \$400,000 railroad shops, the hotel, etc., the improvements at Gulfport alone will represent an investment of about \$3,000,000. The capital stock of the railroad is \$5,000,000, all of which is outstanding. To provide for refunding existing indebtedness, for completion of the Gulfport harbor, for terminal facilities, etc., an issue of \$5,000,000 gold bonds was arranged for in February of this year.

The distinguishing characteristic of all the improvements made under the direction of Captain Jones is their thorough substantiability. He proposes that they shall withstand any storm that may come up, even one like the Galveston storm. The pier is declared equal in construction to that of any in the United States. It is filled solid with earth excavated from the basin and channel, and is practically immovable. In the construction of the docks the best features of those at Pensacola and the Stuyvesant docks at New Orleans were adopted, and none will be superior. They are most thoroughly bulkheaded, and in arrangement and construction are unsurpassed. A detail is the fact that all piling and other timber exposed to the salt water have been thoroughly creosoted. The dockage capacity of the port will be thirty vessels at a time, and the arrangement of the railroad tracks is such that all boats can be loaded from the cars.

In the schedule of port charges the fact

that there is no charge for ballast is mentioned as an attractive feature to skippers. These are the rates:

Pilotage to and from Gulfport pier to sea.....\$4 per ft.
Inward towage from sea to pier.....5c. per ton.
Outward towage from pier to sea.....10c. per ton.
Handling and depositing mixed ballast from ship's rails.....20c. per ton.
Handling of clean rock ballast from ship's rails.....No charge.
Water (artesian), unlimited supply, very best quality.....No charge.
Bunker coal alongside.....\$3 per ton.

Stevedoring charges are as low as at any adjacent ports.

A shipbuilding industry is among the ambitions of Gulfport, its proximity to the finest of ship timber and to the iron and steel of Alabama furnishing the opportunity. While the great stimulus of the isthmian canal will create the occasion for industries of this sort on the southern coast, already shipbuilding is being engaged in in a small way by the Gulf & Ship Island people, and the enterprise is expected to experience a great expansion.

The whole story of Gulfport and the vista these vast improvements opens up can hardly be told in one letter. For instance, it would require more space than can be given here to go into the present needs of the city in a building way. This is indicated in the fact that 300 hands are working in Gulfport whose families are elsewhere. There are no houses to be had. Hundreds are bunking in shacks or sleeping in tents. The officers of the road are actually afraid of trying too hard to attract people Gulfportward, because of the lack of places where they may live. But the opportunity to get in at the beginning of a great development will induce hundreds to forego present inconveniences, and it seems altogether probable that the rate of increase which has prevailed this year will be kept up. Gulfport is now doubling its population every six months.

ALBERT PHENIX.

FOR NEW ORLEANS.

Influences Making for Its Greater Importance.

In a letter to Mr. W. G. Wilmot of New Orleans, who is conducting a practical campaign for an increase in the Southern membership in the National Association of Manufacturers, which is to meet at New Orleans in April next, Mr. D. M. Parry of Indianapolis, president of the association, writes:

"The National Association of Manufacturers is growing at the rate of 150 per month. I confidently believe that we shall have over 2000 members when the call goes out for our members to assemble in New Orleans, April of 1903. You are doing great work not only for the association, but also for the South. The future is bright with hope for Southern manufacturing industries. The great natural wealth of your States has hardly been touched. You do not know how rich you are. A few years will set the tide growing towards the South, and there will be an era of development surpassing any growth of the past."

One of the purposes sought in the meeting of the National Association of Manufacturers at New Orleans is the extension of trade with the Latin-American republics. Naturally much of the increase in that trade would pass through New Orleans, and in that connection a statement prepared by Mr. Tom Richardson, secretary-manager of the New Orleans Progressive Union, is of interest. It is filled with statistics showing the importance of New Orleans as a cotton port, the trend toward it of grain shipments from the Northwest and Middle West, and of lumber shipments from Louisiana, Texas, Mississippi and Arkansas, the promise of handling all products of the packing-

houses at Fort Worth, Texas, and the large and constantly-increasing import business of the city. Commenting upon this statement, the New Orleans States says:

"As a matter of fact, we have simply reached that point in our development where we are compelled to progress. If we do not take advantage of the situation ourselves and push forward, others are going to do it and reap the benefits, as they will deserve to do. The time has passed when we can fold our hands, and, by doing nothing ourselves, arrest the progress of New Orleans. This city is going ahead at a surprising rate, and with or without our help it must and will continue to progress until it fulfills its destiny of becoming one of the world's great centers of commerce and industry. The only question is, whether we shall push it forward to that point or sit down and let others do it and reap the rich reward that we could get by the mere effort to obtain it. That is the important question we of New Orleans are called upon to decide now, and we can neither evade nor postpone the answer."

Commerce With Turkey.

Editor Manufacturers' Record:

I beg leave to draw your attention and the attention of all American manufacturers to the fact that I desire to represent American firms dealing in leathers, hides, glazed kid, splits patent leather, lard and grease, cotton ducks, rums and cordage in general. American colored leathers are greatly in demand.

Several attempts have so far been made to import this class of goods, and satisfactorily, but for the fact that American manufacturers demand payment against confirmed credit in New York, to which our market is strongly opposed. Of

course, I never attempted or care to have goods sent to me on credit of two and three months from date of invoice, as European firms allow, but have repeatedly proposed to them to send goods and payment to be effected at our local banks on delivery of shipping documents. Our banks are so strict about it that they do not even allow us to see the goods prior to our settling the amount of invoice which is attached to the bill of lading. This system, plain as it may appear, requires some explanation. Immediately on shipping the goods all the manufacturer has to do is to send bill of lading and invoice to either the Imperial Ottoman Bank or the Credit Lyonnais Bank of our city for collection of amount of invoice, when, of course, on arrival of steamer the buyer presents himself to the bank, pays the amount, and eventually gets possession of the bill of lading, by means of which he withdraws goods from customs.

Another difficulty till now was the transmission of samples by post, but, thanks to the establishment of the parcel post system between the United States and England, this difficulty has been overcome, and packages can now be sent for a trifle.

Any manufacturer adhering to these hints can do an enormous business in Turkey, as our market has turned to America, being really tired of what the Continent has heretofore been supplying, and being aware that American firms are both superior and can compete with any European goods. I hope that American manufacturers will avail themselves of the opportunity offered them.

L. GUODEN.
Constantinople.

The Houston (Texas) Business League has begun a movement for the organization of a company which will be prepared to subscribe to the stock of worthy enterprises seeking location in that city.

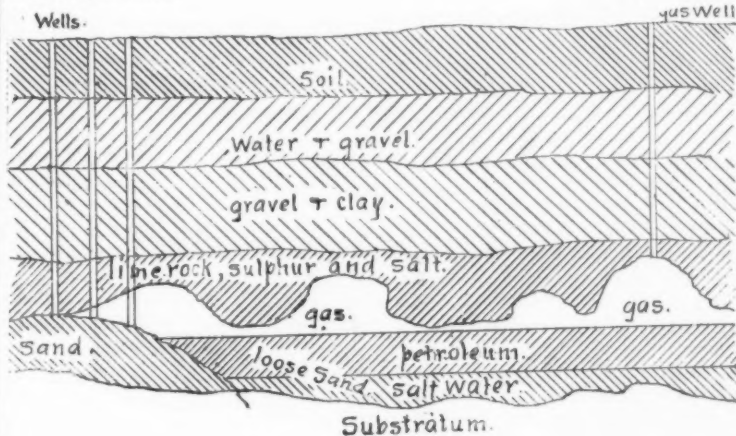
SALT WATER IN OIL WELLS.

An Explanation of Phenomena in the Beaumont Field.

Of late I have been repeatedly asked why the wells at Beaumont have ceased to flow and at times give salt water. The accompanying diagram explains the phenomena. It will be seen, as shown from the logs or register of the wells, that the oil-bearing strata is not uniform. The gases within the proved field demonstrate the fact that the gas is found in those

Hogg-Swayne Tract.

Guffey Tract.



wells where the unconformable stratum that carries the petroleum, gas and salt water in loose sand reaches the highest elevation.

In that section of the field where numbers of small-caliber wells were clustered the great pressure from the rest of the pool naturally banked the sand at the point of exit, as shown in the dark lines. Had the sand not been loose it would have been impossible for it to have been forced to its present position around the

wells by gas pressure. Again, had the wells been of a large caliber they would have cleared themselves. These facts account for the condition that at certain points in the field gushers may still be had. Naturally, as the petroleum leaves the pool the salt water must rise to a point above the lower opening of the pipe, and water follows.

I believe that to a certain extent the trouble in the field is due to the power of the gas, oil and salt-water currents in their efforts to reach the wells, and conse-

quently carrying the loose sand in an enormous drift to the point of least resistance. Over a year ago I stated in the Manufacturers' Record that the Beaumont wells were not of sufficient caliber, and that large wells should be drilled so that the sand could work its way out. After what has taken place I cannot fail to reiterate this advice for the benefit of the field and its future success.

C. F. Z. CARACRISTI.

Mobile, Ala.

RAILROADS.

[A complete record of all new railroad building in the South will be found in the Construction Department.]

EXTENSIVE RAILROAD PLAN.

Terminals and Belt Lines for Three Oklahoma Cities.

According to dispatches from Kansas City, the incorporation at Guthrie, Okla., of the Central Oklahoma Union Depot & Terminal Railway Co. is part of a big plan to build a railroad from Jefferson City, Mo., to El Reno, Okla.; to construct a line connecting El Reno, Guthrie and Oklahoma City, and also to build union depots in those three cities. The Oklahoma Central & St. Louis Railroad is to be the name of the line from Jefferson City to El Reno, and the incorporators of the terminal company include J. J. Collister, W. S. McCaull, J. G. Trimble, George F. Riehl, L. Underwood and W. H. McHattie of Kansas City, and two Oklahoma capitalists. Mr. McCaull is claim agent of the Quincy, Omaha & Kansas City Railroad; Mr. McHattie is a clerk in the employ of the same railroad; Mr. Trimble is a lawyer in the employ of the Missouri, Kansas & Texas Railroad, and Mr. Collister is commercial agent for the Baltimore & Ohio Railroad.

It is stated that rights of way have been secured for 200 out of the 600 miles of line which it is proposed to build, and agents are closing contracts for more. The road will run via Cross Timbers, Wheatland, Flemington, Humansville, Stockton, Jericho and Joplin. At Jefferson City it will connect with the Chicago & Alton and the Missouri Pacific. The line will penetrate, it is stated, a rich mineral country, and will develop fine coal fields.

The terminal plan is said to be very important, as it provides for a complete system of connecting tracks between Guthrie, Oklahoma City and El Reno, and also for a union depot and a belt line for each.

Earnings of Texas Railroads.

The annual report of the Texas railroad commission for the year ended June 30 last shows on that date there were 10,617 miles of railroad track in the State, exclusive of logging, private and electric roads, and lines not completed. The yard track and sidings amounted to 1935 miles, making a total of 12,552 miles. Only ninety-two miles of main line are narrow gauge. Officers and employes numbered 48,002. There were 1305 locomotives and 39,976 cars of all kinds.

For the year gross earnings were as follows: From passengers, \$12,172,778.02; mail, \$1,270,141.25; express, \$1,024,877.30; extra baggage, etc., \$236,115.28; freight, \$42,206,707.85; miscellaneous, \$1,979,816.16; total, \$58,890,495.89.

Operating expenses, after deducting expenditures in the nature of additions, were: Maintenance of way and structures, \$10,752,022.72; maintenance of equipment, \$6,891,369.16; conducting transportation, \$29,137,914.69; general expenses, \$2,017,807.82; unclassified, \$3648.36; aggregate, \$45,802,762.75. Percentage of operating expenses to gross earnings, 77.78. Income from operation, \$13,087,733.14.

The following general averages per mile of road are shown: Freight earnings, \$3991.27; passenger train earnings, \$1390.47; gross earnings from all sources of operation, \$5568.96; operating expenses, \$4331.32; income from operation, \$1237.76.

The percentage of operating expenses increased from 70.36 per cent., as shown in tenth annual report, to 77.78 per cent. In per mile of road averages freight de-

creased \$319.17; passenger train earnings increased \$10.73; gross earnings from all sources decreased \$292.74; operating expenses increased \$206.90, and income from operation decreased \$449.64.

The net accumulated deficit in the income accounts of the companies increased \$2,550,417.62, but this is more than accounted for by the added value to the properties paid for out of the income accounts.

Pennsylvania Raises Wages.

The Pennsylvania Railroad Co. has, dating from November 1, given a 10 per cent. increase in wages to all permanent employes receiving salaries of less than \$200 per month. It is estimated that about 95,000 men will be affected by the increase. Concerning the advance Mr. Charles E. Pugh, second vice-president of the company, is quoted as saying:

"The directors and officers of the company recognized that there had been a big increase in all kinds of business, and at the same time the cost of living was considerably greater than it has been. During the great prosperity of the past few years the men have worked faithfully, and we hope to greatly profit by the action just taken. There was some talk of an adjustment of wages, but it was finally decided to make a liberal increase, and we think the action taken shows what our intention was. This is the first general advance the company has made for some years. There have been a number of adjustments made, and, although some salaries have recently been advanced, they will reap the benefit of the 10 per cent. increase also."

The Baltimore & Ohio Railroad has, it is understood, been increasing the wages of employes here and there for about a year.

'Frisco System Finances.

The stockholders of the St. Louis & San Francisco Railroad Co. have approved the purchase of the Chicago & Eastern Illinois Railroad Co. and of the St. Louis, San Francisco & New Orleans Railroad Co., formerly the Arkansas & Choctaw Railroad Co. For the purpose of this last-named purchase, the proposed extension of the line of the St. Louis, San Francisco & New Orleans Company and the equipment of said line, the stockholders authorized the issue of bonds not to exceed in the aggregate \$8,700,000.

The proposed extension of this line runs from Fridenore to Lawton, where it will connect with the Oklahoma City & Western Railroad, also owned by the San Francisco system. The entire mileage of the line will be some 350 miles.

The annual report for the year ended June 30, 1902, shows gross earnings from operation \$21,620,882, increase \$2,296,603; operating expenses \$13,472,470, increase \$2,062,583; net earnings from operation \$8,138,411, increase \$234,020; miscellaneous income making total net income \$8,345,572, increase \$242,371; surplus, less interest, rentals, taxes, improvement and dividends, etc., \$1,472,197, decrease \$524,961.

Absorbed by the 'Frisco.

St. Louis advices report an official announcement that the St. Louis & San Francisco Railroad system has purchased the St. Louis & Gulf Railroad, a line of about 250 miles in the St. Francis basin, and also the St. Louis, Memphis & South-eastern Railroad, which has about 250 miles of road in operation and about 180 under construction.

The St. Louis & Gulf comprises the former Houck lines, owned by Louis Houck of Cape Girardeau.

They are west of the Mississippi river

and south of Cape Girardeau. The portion of the Southeastern under construction is between St. Louis and Cape Girardeau. The portion already built runs south from Cape Girardeau towards Memphis. The part now under construction will be finished within six months and connected with the 'Frisco proper.

These lines will give the 'Frisco a direct low-grade line between St. Louis and Memphis. It has long been understood that the 'Frisco would get the Southern, and also that it would finally absorb the St. Louis & Gulf.

After Alabama Coal.

The Tunnel Coal Co., a corporation subordinate to the Central of Georgia Railway, according to a Birmingham dispatch, has purchased 5000 acres of coal lands in the upper Cahaba valley, in St. Clair county, north of Leeds, Ala. Not long ago this company purchased 8000 acres of coal lands in the same vicinity, and the aggregate of the investments represents something like \$175,000.

These coal lands are known as Black Creek and Middle Black Creek, and contain four workable seams. The Central will build six or eight miles of track to develop the coal, and the Seaboard Air Line extension from Coal City to Birmingham runs through the property for several miles.

In the same territory the Tennessee Coal, Iron & Railroad Co. has started to develop extensive coal fields. Its property is in Jefferson county, in the vicinity of Henry Ellen. The Central of Georgia, the Seaboard Air Line and the Southern will, it is said, all build extensions to the Tennessee company's new openings.

Florida Railroads.

The Florida railroad commission has made public, for the year ended June 30 last, statistics concerning the railroads in the State, excepting four which have not reported. It is shown that the total gross earnings from operation on the Florida business done by the railroads reporting amounted to \$10,079,802.23; the operating expenses in Florida amounted to \$7,481,648.24, and the net earnings were \$2,598,153.99. The operating expenses were 74.24 per cent. of the total gross earnings from operation.

The roads showing the largest net earnings from operation were: Savannah, Florida & Western, \$1,095,741.77; Seaboard Air Line, \$684,905.84; Florida East Coast, \$533,656.20; Louisville & Nashville, \$145,592.01, and the Florida Southern, \$117,273.31.

The aggregate passenger train earnings for the roads reporting were \$3,409,624.20; freight train earnings were \$6,441,222.71.

Railroad Deal Reported.

According to a report from Charleston, W. Va., the Charleston, Clendennin & Sutton Railroad has been purchased by the Pennsylvania Railroad or by interests affiliated with it. Sometime ago it was reported that the Wabash Railroad had bought the line. Neither report has yet been confirmed.

The Charleston, Clendennin & Sutton Railroad extends from Charleston to Big Otter, in the northern part of Clay county, a distance of sixty-four miles. It is projected to go via Sutton to Beverly to connect at the latter point with the West Virginia Central. At Sutton it would connect with the Baltimore & Ohio Railroad. The officers are: President, T. H. Given, Pittsburg, Pa.; vice-president, C. C. Lewis, Charleston, W. Va.; secretary and treasurer, Samuel L. Harman; general manager, J. Wainwright, Philadelphia, Pa.

May Extend Through Mexico.

It is rumored at Kansas City that the Chicago, Rock Island & Pacific Railway is planning to build an extension through Mexico to the Pacific coast like the Kansas City, Mexico & Orient Railway, now in course of construction. The Rock Island has, it is reported, recently secured control of the Rio Grande, Sierra Madre & Pacific Railroad, extending from Juarez, opposite El Paso, to Terrazas, Mexico, 250 miles, and it is stated that surveys have been made from that point to the coast of the Gulf of California via Tutunaca and Santa Rosa, Mexico, following the course of the Rio Mayo river to Santa Cruz, from which point the coast line is followed for fifteen miles into Agiabampo, the proposed western terminus. Concessions from the Mexican government would have to be obtained before the new line could be built.

Arkansas Northern Plans.

Dr. J. H. Myers, one of the promoters of the line, writes to the Manufacturers' Record concerning the projected Arkansas Northern Railroad. He says: "The proposed line is to begin at a point near the Southern Missouri State line about two degrees west of the fifth meridian, and will run thence in a southerly direction through Randolph, Lawrence, Independence and Jackson counties, and along the 'flat woods' or second bank in the foothills west of Black river, and passing through Pocahontas, Black Rock, Powhatan, Calamine, Cord, Newark, Jacks-onport and other towns. The construction will depend upon the attitude the people take along the line. The route is on almost level soil, and but little rock; the distance about 100 miles."

Alexandria to New Orleans.

Advices from Alexandria, La., quote A. L. Phillips, chief engineer of the proposed railroad from Alexandria to New Orleans, as denying the report that it is projected by the St. Louis & San Francisco Railroad. He says that the 'Frisco has no connection with it. It is now rumored that parties interested in the Fort Smith & Western road are concerned in the new enterprise. It is understood that the plans are to build a line from Alexandria east of the Texas & Pacific and to cross that road at Palmetto, whence the line will go about halfway between the Texas & Pacific and the Southern Pacific lines to Plaquemine. From the latter point to New Orleans it will parallel the Texas & Pacific.

Work on the East & West.

Dispatches from Birmingham, Ala., report that machinery for cutting a big tunnel through Oak mountain at the Hardwick Gap, on the East & West road of the Seaboard Air Line, has arrived at Leeds, and a large number of men employed by John Blair MacAfee, the contractor, are at work. L. W. Clark of Philadelphia is superintendent of construction of the tunnel. B. O. Watkins has the contract for the big cut near the tunnel, and his camp is near Odenville. Williams & Wright have camps west of Branchville. Jones & Brewer are at Carroll Springs, near the Cahaba river, north of Leeds. The Seaboard, it is stated, will open the upper end of the Cahaba coal fields.

Western Maryland Terminals.

The deeds for the land (about twenty-five acres in extent) for the new Western Maryland Railroad terminals in Baltimore have been put on record. The land is in the southern part of the city, and on the north shore of the Patapsco river.

About fifteen acres were bought from the Winans estate and ten acres from the Baltimore Sanitary Contracting Co. The present terminal of the Western Maryland Railroad is at Hillen Station, about two miles from this property, but it is proposed to build an extension through the western annex of Baltimore city to reach tidewater. Negotiations are reported to be in progress for property adjoining the land just purchased.

Savannah and the South.

The Merchants and Miners' Transportation Co. has issued its winter excursion book, describing routes and rates from Baltimore and elsewhere to Savannah and other points in the South. It contains all the information necessary for tourists desiring to go to Florida, Cuba and other places sought by travelers for relief from the winter climate of the North. Special announcement is made that personally-conducted tours to Savannah and Florida will be run during January, February and March. Copies of the pamphlet, which is tastefully illustrated, can be obtained from the general passenger agent, Mr. W. P. Turner, Baltimore, Md., or from agencies at other places.

Augusta Railway Officers.

As a result of the recent deal at Augusta, Ga., the old directors of the Augusta Railway & Electric Co. have resigned and a new board has been elected as follows: J. U. Jackson, D. B. Dyer, Boykin Wright, R. Lancaster Williams, George Conklin, John Blair MacAfee and George Herbert Jackson. Mr. James U. Jackson was elected president; Mr. R. Lancaster Williams, vice-president, and Mr. A. H. Rutherford, treasurer. The property is now controlled by the same interests as the Augusta & Aiken Electric Railway.

Will Build a Subway.

The Terminal Railroad Association of St. Louis has decided to build a baggage subway sixty feet wide under the trainshed tracks. It will be two blocks long from Eighteenth to Twentieth streets, and baggage will be raised and lowered by elevator. The association has also decided to build a new roundhouse and to make large extension of terminal tracks on each side of the Mississippi river. A new power-house will also be built and a new interlocking plant installed.

'Frisco's New Office Building.

The St. Louis & San Francisco Railroad Co. proposes, according to a dispatch from St. Louis, to erect a 12-story office building for its headquarters on the site of the Emille Building, at the southwest corner of Ninth and Olive streets, at a cost of about \$700,000. The new structure will be known as the 'Frisco Building.

Railroad Notes.

It is reported from Leeds, Ala., that engineers are surveying near there for the Brunswick & Birmingham Railroad.

The White River branch of the Missouri Pacific and Iron Mountain roads has been opened sixteen miles further from Penters Bluff to Mt. Olivet, Ark., making about forty miles of the new line completed.

The large pier to be erected at Locust Point, Baltimore, by the Baltimore & Ohio Railroad Co. will be built by A. R. Morrison of Wilmington, Del. It will cost about \$450,000, and will require about ten months to construct. It will be 850 feet long and two stories high, and will contain offices, storage and baggage room, as well as quarters for immigrants, for it will be used by the North German Lloyd Steamship Co.

MINING.

Will Develop 60,000 Acres.

The Thomas Coal & Land Co., Tracy City, Tenn., has acquired about 60,000 acres of valuable coal land in the Cumberland mountains, beginning four miles from Tracy City, which it is the intention to develop by leasing to parties who wish to operate. The company will hardly work any of this land as a company at all, although some individual work may be done, it being the intention to put a railway into the center of the tract and then lease, requiring the lessees to build a certain number of coke ovens on their holdings, 1000 acres or more to each. The "Sewanee Seam" and the "Bon Air" are both on this property. The officers of the company are: W. H. Thomas, president; Dr. D. H. Thomas, secretary and treasurer, and E. M. Jones, superintendent, and in charge on the grounds. It is impossible to tell how soon machinery will be required, since that depends on the completion of the railroad. The capital stock is \$100,000.

Alabama Iron Mine.

The Muscadine Mining Co., Iron City, Ala., incorporated sometime ago, is rapidly developing 200 or 300 acres of mining land at Iron City. This ore is said to analyze from 53 to 59 per cent. of pure metallic iron. The company has installed a steel log washer, and now has a capacity of 5000 tons daily. The washer is located close to the Southern Railway, with which double tracks connect. Capt. L. B. Miller, Cleveland, Ohio, is president of this company, and Mr. W. A. Glover is superintendent; \$200,000 has been or will have been expended on the completion of work now under way. Furnaces have been contracted for the entire output of this plant, which will be sold by analysis.

To Develop 22,000 Acres of Coal Land.

J. N. Davidson, president of the Second National Bank of Allegheny, Pa., and others are reported as having purchased 22,000 acres of Pittsburg seam coal in Washington county, Pennsylvania, and in the Panhandle of West Virginia. The company will be known as the Pittsburg Vein Coal Co. This property is penetrated by the Wheeling division of the B. & O. R. R., the Wheeling division of the Panhandle, and it will be entered, so it is said, by the Wabash and by a new road called the Uniontown & Wheeling Railroad.

Loup Creek Colliery Co.

A charter has been issued to the Loup Creek Colliery Co., Charleston, W. Va., incorporated with \$2,000,000 capital by William N. Page, Raleigh C. Taylor, George W. Imboden and W. H. Evans of Ansted, W. Va., and Capt. Thomas D. Ranson of Staunton, Va. It is said that this company will hold 25,000 acres of West Virginia lands. The offices will be at Ansted, and the chief works in Fayette county, in the Kanawha district. The company will mine coal, manufacture oils and artificial gas, and will bore for natural gas.

Zinc and Lead Mines.

Land containing lead ores situated about twenty miles to the east of Madisonville, Ky., and known as the Felix Cox, the John Franklin and the John Foley farms, are said to have passed into the hands of A. M. Hulet of the Kewanee Fire-Clay Co. for \$20,000, \$4700 and \$2500, respectively. These ores are reported to be very valuable, and to contain a high percentage of lead. A lead

of lead and zinc has been discovered in Crittenden county, near Marion P. O. This is on the property of John P. Reed.

Mining Notes.

The Cumberland Basin Coal Co., Cumberland, Md., is reported as opening a mine near Corriganville, Md.

Chickasha Gravel Co., Chickasha, I. T., has been incorporated, with \$50,000 capital, to develop cement gravel deposits.

El Lucero & San Augustin Mining Co. has been incorporated in St. Louis, Mo., with \$200,000 capital stock, of which John H. Wolf holds the greater part.

The La Belle mine at Holly Springs, Ga., has been sold to Isaac B. Naylor of Philadelphia, who will install new and modern machinery for its working.

Messrs. Griffin & McDonald are searching for the Boley Fields vein of gold near Dahlonega, Ga. A pump and steam drill will be in operation in about two weeks on this work.

A. M. McKennan is president, T. B. May is secretary and R. A. Rogers is treasurer of the Knoxville Anthracite Coal Co., Knoxville, Tenn., incorporated with \$4000 capital.

The Jeannette Mining Co., San Angelo, Texas, has been incorporated, with \$5000 capital, for general mining purposes, by George Hagelstein, S. W. Merchant, J. L. Malone and W. P. Kelly.

J. D. Carroll, W. M. Morgan, J. J. Wilson and J. H. Galbreath have chartered the Creek Oil & Mining Co., Corsicana, Texas, with \$50,000 capital stock. This company will mine and drill for oil.

The Virginia Consolidated Copper Co., Luray, Va., owns 200 acres of mineral rights, or about ten full claims, on a spur of the Blue Ridge some four miles from Luray. The capital of this company is \$1,000,000.

Philip M. Huecke, Philip Kolb, Aikman Welch, Geo. A. Held, John L. Bogy, F. L. Barada and James R. Waddill have incorporated the Sainte Genevieve Lime & Quarry Co., Sainte Genevieve, Mo., with \$100,000 capital stock.

The Gold Standard Mining & Milling Co., Wildman, O. T., recently incorporated with \$1,500,000 capital stock, has had samples of its ore analyzed. These are said to run \$44.90 in gold to the ton. The vein is five feet in thickness.

Tunnel Coal Co., Birmingham, Ala., organized several months ago and working extensive Alabama coal lands, has purchased additional properties to the extent of 5000 acres. This property will be developed, the entire output going to the Central of Georgia Railroad.

Northern capitalists represented by E. W. Church have closed a deal with Mr. De Witt Steel of Covington, Va., by which they will develop the superior clay and limestone on the latter's property a few miles from Covington. Brick and lime plants will be put in later.

In the interests of Northern capitalists, reported as preparing to buy promising mineral lands in this section, Mr. Henry E. Crawford, mining engineer, of New York, has been prospecting and investigating the district surrounding Salem, Ky. Zinc and lead are most wanted.

G. A. McLaughlin and K. Connelly of New York, R. E. Swezey of Brooklyn, W. D. Clark of Englewood, N. J., and F. D. Peale of East Orange, N. J., are the incorporators of the Marion County Coal Co. of Fairmont, W. Va. The company was incorporated with \$10,000 capital.

Several veins of coal, said to be excellent in quality, have been discovered and are being worked to a limited extent a few miles from the railroad and the town

of Gurley, Ala. Messrs. Tom Gurley and Wm. Vincent are opening one of these, which is some three or four feet thick.

Greenbrier Trading Co., Union, W. Va., has been incorporated, with \$2000 capital stock, to conduct a general coal-mining and lumber business. The incorporators are P. H. Rorer, Edwin Mann and W. C. Pollock of Bluefield, W. Va., and A. C. Houston and R. B. Brand of Union.

With \$20,000 capital the Upper Potomac Mining Co., Oakland, Md., has been incorporated by Russell S. Hubbard and Harris M. Datesman of Philadelphia; W. McCulloch Brown of Corunna, Md.; Frederick A. Thayer and Edward H. Sincell of Oakland. This company will mine coal.

With \$1,000,000 capital the Mutual Mining and Milling Association, Baltimore, Md., has been incorporated by Robert Goode, Baltimore; George W. S. Loucks, J. Frank Small, York, Pa., and Gardner W. Kimball of Wilmington, Del., to purchase and develop mineral lands.

It is reported that Thomas G. McKell, Chillicothe, Ohio, has purchased a controlling interest in the Gauley Mountain Coal Co., Ansted, W. Va. This company operates the Nova Scotia and Rich Creek mines in the New River field, and works 400 men. Abram S. Hewitt, New York, is president of this company.

Henry T. Buie, Buffalo, Ark., is president, and M. E. Merritt of Chicago, Ill., is the secretary and treasurer of the Buffalo-Chicago Zinc & Lead Co., capitalized at \$1,000,000. This company owns 2500 acres of land, partially developed and convenient to the railroads; it is comparatively close to Buffalo, Ark.

A charter has been issued to the Hamilton Coal & Coke Co., Baltimore, Md., to conduct a general mining business. The capital stock is \$150,000. W. A. Somerville, Frostburg, Md.; Alvin P. Irving and Howard Adams and Frederick Dallam of Baltimore are the incorporators. This charter was obtained at Charleston, W. Va.

The firm of York Bros., mineral experts and prospectors, has located in Western Macon county, near Macon, Mo., and will develop coal lands in that section belonging to W. E. McCully and T. E. Wardell, and to the south of Macon and on the line of the Iowa & St. Louis Railroad, lands owned by Dr. E. B. Clemens and Col. David B. Moore.

The Tennessee Coal, Iron & Railroad Co., Birmingham, Ala., has started work on the extensive developments of the coal fields near Henry Ellen. It is intended to open mines that will shortly have a daily output of 1500 tons of coal. The Central of Georgia, the Southern and the Seaboard Air Line will build extensions to reach this mine.

Mt. Marion Coal Mining Co., capitalized at \$50,000, with workings near Strawn, Texas, the headquarters of the firm, will later need an electric plant, although up to this time the plans for this have not been executed. This firm will shortly need mine cars, rails and general mining supplies. At this time but one shaft will be opened; this will have an output of from 800 to 1000 tons daily. W. R. Carpenter is president; W. W. Johnson, vice-president, and C. M. Burklew, secretary and treasurer.

Mr. L. M. Fouts, the retiring president of the Weatherford, Mineral Wells & Northwestern Railroad, which has been absorbed by the Gould lines, has been presented with a loving cup by his former official associates. It is of solid silver, nine inches high, and is appropriately inscribed.

TEXTILES.

[A complete record of new textile enterprises in the South will be found in the Construction Department.]

Correspondence relating to textile matters, especially to the cotton-mill interests of the South, and items of news about new mills or enlargements, special contracts for goods, market conditions, etc., are invited by the Manufacturers' Record. We shall be glad to have such matter at all times, and also to have any general discussion relating to cotton matters.

Silk Mill at Cumberland, Md.

The Klotz Throwing Co. has decided to establish a large permanent plant at Cumberland, Md., in which city it has been operating an educational and experimental plant during the past year. Plans and specifications have been prepared for the main building, and the work of construction will begin at once. This structure will be of brick, 80x230 feet in dimension, and will be equipped with a complete modern plant for silk throwing. Details as to this equipment and amount to be invested in the establishment have not been announced as yet. The Klotz Throwing Co. is a \$500,000 corporation, with main plant at Scranton, Pa.; branches at Carbondale, Pa., and Fredericksburg, Va., and New York offices at 487 Broadway.

A \$300,000 Plant.

The Manufacturers' Record of November 6 mentioned that J. M. Torrence (until recently superintendent of the Lowe Manufacturing Co. at Huntsville, Ala.) had optioned a water-power property near Bessemer City, N. C., and there intended to locate his proposed cotton mill. Mr. Torrence is rapidly completing the arrangements ensuring the establishment of this enterprise, and has secured a portion of the capital required. He has about decided to form company, to be capitalized at \$300,000, and build a plant for manufacturing madras and other fine colored goods. Electrical power will be used for operating the machinery. Mr. Torrence can be addressed at Bessemer City. Full details will soon be announced.

The Cotton Movement.

In his report for November 14 Col. Henry G. Hester, secretary of the New Orleans Cotton Exchange, shows that the amount of cotton brought into sight during the seventy-five days of the present season was 4,154,370 bales, an increase over the same period last year of 315,057 bales; exports were 1,970,243 bales, an increase of 59,774 bales; takings by Northern spinners 526,052 bales, an increase of 10,509; by Southern spinners 490,193 bales, an increase of 51,882 bales.

Textile Notes.

It is reported that Messrs. R. A. Lewis of Belton, S. C., and E. A. Smythe of Pelzer, S. C., will build a cotton mill near Stantonville, S. C.

The Smithfield (N. C.) Cotton Mills has let contract for a quantity of additional machinery. The company is now operating 5000 ring spindles.

Messrs. J. E. Nelson, S. J. Shlenker and A. E. Bowen have incorporated Mississippi Valley Batting Co., with capital stock of \$10,000, to deal in cotton batting, etc.

A movement has been started at Forrest City, Ark., for the establishment of a cotton factory. It is probable that a company will effect organization in the near future.

Piedmont Manufacturing Co., Portsmouth, Va., has completed its bleachery and put it in operation during the week. This company will be prepared to do a

quantity of bleaching besides that of its own plant.

Robert Christie and associates of Coloma, Md., contemplate establishing fiber works. They have held a meeting to further the project, and obtained \$4000 in subscriptions to a company if organized.

Samuel L. Haines, 126 East Mis street, San Francisco, Cal., wants to obtain the agency for sale of a cheap and medium line of tickings in plain blue and white and fancy notions made by Southern mills.

Hawkinsville (Ga.) Cotton Mills, now operating 3000 ring spindles and eighty looms, will add sixty 40-inch looms. The company is prepared to consider estimates on furnishing the machines, also on electrical supplies.

It is proposed to organize a \$100,000 stock company for the purpose of establishing a cotton factory at Jacksonville, Ala. Reports state that J. L. McComb, a South Carolina cotton-mill operator, is leading the movement.

F. W. Howard, superintendent and buyer for Belding Bros. & Co. of Belding, Mich., manufacturers of silk threads and fabrics, has been visiting Birmingham, Ala., investigating the possibilities for manufacturing raw silk in that vicinity.

Seaboard Knitting Mills of Henderson, N. C., have passed into the control of A. C. Zollecoffer as receiver. The plant will be offered for sale at public outcry on December 10. It is equipped with thirty-three knitting machines, uses steam-power and dyes its product.

Manetta Mills of Lando, S. C., has let contract for the erection of an additional building. This structure will be two stories high, 75x350 feet. It is not stated what new machinery, if any, will be installed, but construction work has begun on the building. Present plant has 7000 ring spindles.

It is reported that the Cheswell Cotton Mills Co. of Westminster, S. C., will make further improvements, to include the erection of a three-story addition and the installation of additional machinery. The present plant has 11,000 ring spindles and 350 looms. No confirmation of this report has been given.

A dispatch from Anderson, S. C., states that the Orr Cotton Mills of that city has definitely decided to double its plant. The company has a plant of 25,000 spindles and 700 looms, capitalized at \$400,000. To double the mill would require an expenditure of about the present capital. No confirmation of the report has been made by the company.

Messrs. Henry D. Hale, W. S. Cook and G. O. Duncan of Mayfield, Ky., have incorporated the Old Woolen Mills Co., with capital stock of \$100,000, and will establish plant. Further details are not known as yet. The parties named recently purchased buildings formerly used for woolen manufacturing, and it is presumed they propose re-equipping the structures.

The Magnolia Cotton Mill of Concord, N. C., is being established by J. M. Odell, and its capacity will be 100 looms. This plant is of an experimental character, and will produce a line of fine goods not heretofore made in the South. A large plant will probably develop from this enterprise. Thomas J. Hatfield, a Philadelphia (Pa.) expert, has been secured to act as superintendent.

Investors at McKinney, Texas, have accepted the proposition of A. F. Parker of Houston, Texas, for the establishment of a cotton factory. At the meeting held to further the enterprise over \$20,000 was subscribed, and the balance will be raised by subscription, books for which are now being circulated. A \$150,000 plant will be built. J. G. Fitzhugh of McKinney

has donated five acres of land as site for the mill.

It was announced some weeks ago that T. C. Duncan, president of the Union Cotton Mills and the Buffalo Cotton Mills at Union, S. C., proposed erecting another cotton mill, to be located at Murphy's Shoals. Mr. Duncan and his associates in the companies named are making preparations to begin work on this enterprise. The shoals are located six miles from Union. Engineers have been making the surveys during the past week. No details have been decided as yet.

The Great Falls Cotton Mills Co. property at Falls City, Tenn., has been sold to Charles H. Fisk of Detroit, Mich., for \$50,000. This property includes mill of 4000 ring spindles and 130 looms, water-power rights at the falls, etc., and Mr. Fisk intends to develop the enterprise to its fullest possible extent. A large dam will be constructed to develop all the power available, and a factory (probably for making electric-light carbons) will be built. Mr. Fisk has also purchased the White county side of the falls for \$50,000.

QUOTATIONS OF COTTON YARNS.

By Buckingham, Paulson & Co., New York, Philadelphia and Chicago, November 18.

No. 10s-1 and 12s-1 warps.....	14 @-
No. 14s-1 warps.....	14 1/2 @-
No. 16s-1 warps.....	15 @-
No. 20s-1 warps.....	15 1/2 @15 1/2
No. 22s-1 warps.....	15 1/2 @15 1/2
No. 26s-1 warps.....	16 @-
No. 6s to 10s bunch yarn.....	13 1/2 @-
No. 12s-1.....	14 @-
No. 14s-1.....	14 @-
No. 16s-1.....	14 1/4 @14 1/2
No. 20s-1.....	15 @15 1/2
No. 22s-1.....	15 1/2 @-
No. 8s-2 ply soft yarn.....	14 @-
No. 10s-2 ply soft yarn.....	14 1/2 @14 1/2
No. 8s-2 ply hard.....	13 3/4 @14
No. 10s-2 ply hard.....	14 @-
No. 12s-2 ply hard.....	14 1/4 @14 1/4
No. 14s-2 ply.....	14 1/4 @14 1/2
No. 16s-2 ply.....	14 1/2 @15
No. 20s-2 ply.....	15 1/2 @-
No. 22s-2 ply.....	15 1/2 @17
No. 30s-2 ply.....	17 @-
No. 30s-3 ply.....	23 @23 1/2
No. 8s-3, 4 and 5 ply.....	13 3/4 @-
No. 20s-2 ply chain warps.....	15 1/2 @-
No. 24s-2 ply chain warps.....	17 @-
No. 26s-2 ply chain warps.....	17 1/2 @-
No. 30s-2 ply chain warps.....	18 @18 1/2
No. 16s-3 ply hard twist.....	14 1/2 @15
No. 20s-3 ply hard twist.....	15 1/2 @-
No. 26s-3 ply hard twist.....	17 @-

Market weak, with prices nominal.

Cottonseed-Oil Notes.

Cottonseed last week in Memphis was quoted at \$13 per ton by rail, and in bulk \$12, delivered; prime crude cottonseed oil, 27 1/2 cents, and off crude, 27 to 28 cents; prime summer yellow, 30 1/2 cents; prime cottonseed meal, \$21 per ton, and cake, \$21.25 per ton; linters, 2 1/2 to 3 cents.

The market for cottonseed products at Dallas, Texas, was quiet and unchanged last week; prompt prime crude oil 27 cents, with sales at that figure; meal and cake quiet at \$19.50 per ton for prompt shipment; linters, 2 1/2 to 3 cents; cottonseed was unsettled at \$16 to \$17 per ton.

Exporters' quotations for cottonseed products at Galveston, Texas, on the 15th inst. were as follows: Cottonseed oil in barrels f. o. b. Galveston, prime refined, 32 1/2 cents; prime crude loose f. o. b. Texas mills, 28 1/2 cents; prime cottonseed meal and cake f. o. b. Galveston, \$22.50 to \$22.75 for November, \$22.25 to \$22.50 for December.

The following are official quotations on cottonseed and cottonseed products as posted at the Cotton Exchange in New Orleans on the 17th inst.: Prime refined oil in barrels, 33 1/2 cents per gallon; off refined in barrels, 32 1/2 cents per gallon; prime crude, loose, 27 1/2 cents per gallon; off crude, loose, nominal per gallon; prime cottonseed cake, \$26.25 per ton of 2240 pounds; off prime cottonseed cake, nominal; prime cottonseed meal, \$25.50 to \$25.75 per ton of 2240 pounds; off prime cottonseed meal, nominal; soap stock, \$1.15; linters, per pound—A, 3 1/4 cents;

B, 3 cents; C, 2 1/2 cents; cottonseed in sacks delivered in New Orleans, \$14 per ton of 2240 pounds; in bulk delivered in New Orleans, \$13 per ton of 2000 pounds.

The annual report to the stockholders of the American Cotton Oil Co. for the fiscal year ending August 31, 1902, has just been issued. The amount of the capital stock issued and outstanding is unchanged, viz., common stock, \$20,237,100; preferred stock, \$10,198,600. The total amount of gold debenture bonds outstanding is \$3,000,000. These bonds mature on November 1, 1915, and bear interest at the rate of 4 1/2 per cent. per annum, payable quarterly. The profits for the year amounted to \$2,373,206.48; deducting debenture bond interest, \$135,000, leaves net profits \$2,238,206.48. From this amount the following dividends are deducted: Preferred stock, \$611,916; common stock, payable December 1, 1902, at 4 per cent., \$809,484, and June 1, 1903, at 2 per cent., \$404,742, or a total of \$1,826,142, leaving a balance of \$412,064.48 carried to general profit and loss account. The permanent investment account has been charged with the sum of \$729,884.32 for additions to properties. The account has also been credited with sales of real estate, etc., amounting to \$227,241.42, the net result being an increase to permanent investment account of \$502,642.90. The net working capital of the company on August 31, 1902, was \$4,648,942.82, of which \$1,245,447.90 was cash in banks and \$3,403,494.92 was bills and accounts receivable, marketable products and supplies. Balance of general profit and loss account August 31, 1901, as per twelfth annual report, \$6,595,944.87, from which is deducted the difference resulting from sale of inactive properties, amounting to \$91,173.62, leaving \$6,504,771.25, and adding a balance to credit of \$412,064.48, leaves a balance of general profit and loss account August 31, 1902, of \$6,916,835.73.

For Exports to Brazil.

Peixoto & Franklin of Ceara, Brazil, write to the Manufacturers' Record that the importing trade of Brazil is accustomed to dealing with European exporters through bills of exchange at sixty days' sight, some firms selling at ninety days, and that American houses desiring to introduce their products should agree upon a sixty days' limit. Peixoto & Franklin are agents in Brazil for foreign firms, and they write that they have offered their services to American manufacturers and exporters, promising to give zeal and care to obtaining business for them.

Ohio River Improvement.

The Ohio Valley Improvement Association at Parkersburg elected John L. Vance, president; James D. Parker, treasurer; E. P. Wilson, secretary, and vice-presidents for Pennsylvania, West Virginia, Ohio, Kentucky and Indiana, and pledged itself to raising \$25,000 to defray the expenses of carrying forward the work of the association. The association will ask Congress to provide for a nine-foot stage at low water between the mouth of the Little Miami and Cairo.

Mississippi Values Increase.

Official figures of the 1902 assessment in Mississippi show a total valuation of all property in the State of \$240,988,132, an increase over 1901 of \$18,141,601. The value of realty increased \$14,403,287, of railroads \$2,326,893, and of personalty \$1,411,421. The increase was in all but eighteen of the seventy-five counties of the State. Since 1900 the increase in values has been more than \$52,000,000.

The National Hardware Association is in session this week at New Orleans.

LUMBER.

[A complete record of new mills and building operations in the South will be found in the Construction Department.]

LUMBER MARKET REVIEWS.

Baltimore.

Office Manufacturers' Record,
Baltimore, Md., November 19.

The tone of the local lumber market during the past week has been quiet, with a steady demand, however, for the various woods on the market. Local dealers have been in the market to some extent, and have been picking up lots for immediate use. Stocks, as a rule, are generally well assorted, and prices all along the line are firm, with a tendency in many cases to advance. The North Carolina pine industry continues to show favorable features, and at all milling points in Virginia and Eastern Carolina stocks continue light, and are quickly absorbed. Prices are firm throughout the list, and stocks in first hands are over 2,000,000 feet less than a month ago. Cypress is in fair demand, and values steady. In white pine the market is firm, with a moderate inquiry. Poplar still attracts buyers, and the demand is active, with prices ranging better than usual, the domestic and foreign inquiry absorbing the output readily at list prices. In all hardwoods the movement is rather quiet, while stocks of dry stuff are light and prices all along the line very steady. The car shortage has a tendency to restrict operations, and manufacturers and dealers being unable to meet the conditions of trade. Foreign exporters report no material change in the situation. All hardwoods abroad, however, maintain values, and the demand from the Continent is showing some improvement.

Charleston.

[From our own Correspondent.]
Charleston, S. C., November 17.

The movement in nearly every avenue of the lumber industry in this section still continues to show considerable activity. The demand for lumber and other wood products is quite pronounced, and shipments continue each week of a more liberal character. The work of improvement in the harbor progresses rapidly. Since about the middle of September the 3000-foot shoal on the outer bar, which did not measure a depth of thirty feet at high tide, has been reduced to 200 feet. It is expected that in a week or two this shoal will be cleared away, when Charleston will have an uninterrupted outlet to the Atlantic ocean of twenty-six feet at low tide, or thirty feet at high water. With these improvements completed no other industry will be more benefited than that of lumber, while the general trade of the port will show each year a material increase in volume. Already the enterprise and energy of lumbermen in the interior in developing timber lands is making this port the depot for shipments of lumber and other wood products. At all milling points adjacent to this city cypress, pine and hardwood lumber is now increasing in output, and stocks are being shipped to the seaboard to be reshipped to Northern and Eastern centers. The demand now from foreign ports is improving, and later on foreign shipments are expected to be more liberal. At Georgetown the harbor improvements are also showing up in good form, and at mean low water there is now fourteen feet of water on the bar. The lumber business at Georgetown shows a fair volume of trade; shipments each week continue liberal, and both for cypress and yellow-pine lumber prices continue very steady. Mills at Georgetown are all busy and well sup-

plied with orders. During the past week shipments of lumber from Charleston were as follows: Schooner Lizzie Babcock for New York with 386,000 feet, and schooner James D. Dewell with 417,000 feet. The steamship Navahoe cleared for Boston with 20,467 feet of lumber among her cargo. The total shipments of lumber from Charleston since September 1 amounts to 19,126,578 feet, of which 18,765,578 feet were coastwise and 361,000 feet foreign.

Brunswick.

[From our own Correspondent.]
Brunswick, Ga., November 17.

The lumber movement for the week just closed did not aggregate as much as for the week previous, either in coastwise or foreign shipments, amounting to a total of only 3,269,493 superficial feet. The coastwise shipments were composed of 2,131,000 feet of lumber, 421,493 superficial feet of cypress shingles. The foreign shipments were 393,000 feet of sawn timber, 220,000 feet of boards, deals and planks, 41,000 feet of joists and scantlings, 18,000 feet of satin walnut boards and 9000 feet of poplar boards. At present there are twenty-seven vessels loading lumber for coastwise and foreign shipment. Freight rates fluctuate between \$5.25 and \$5.50, with but few vessels tendering. It is thought that there would be more activity in chartering in this period of the month than there was in the earlier part. The steamer movement for the week amounted to a total of 909,687 superficial feet; out of this, 533,275 feet went to Boston and 376,412 going to New York, consisting of 293,150 feet of lumber, 1097 railroad cross-ties and 54,850 pieces cypress shingles. Mr. Benito Padrosa, one of the largest lumber dealers in the South, has just returned from an extended trip in France and Spain, where he went in interest of his foreign trade. He placed orders for over 6,000,000 feet of Southern pine to be shipped to Spanish-speaking territory, and has made charters to move same between now and the first of January, 1903. Reports from the port of Darien show that the lumber movement last week amounted to 1,435,000 feet of sawn timber and 72,000 feet of deals, a total of 1,507,000 feet foreign, and 548,559 feet of sawn timber coastwise, making a grand total of 2,055,000 feet. The movement at Fernandina was also large, and a fleet of considerable size is now in port. Reports from the interior mills adjacent to these ports show an abnormal condition of orders on hand, with heavy shipments, both to Western markets and seaboard delivery. Some extra large orders are reported for unusual length stock, with a good prospect of being placed soon for Eastern delivery via vessel. Recent charters quoted for the above ports show a basic rate from Brunswick to New York for lumber at \$5.25, and ties at 15 cents, and are, from Brunswick, schooner R. T. Maul, 512 tons, ties at 15 cents; schooner Jas. W. Paul, Jr., 1656 tons, with cross-ties at 15 and switch ties at 15½ cents; schooner Aetna, 297 tons, with lumber at \$5.50; schooner Ed. T. Statesbury, 1277 tons, with ties to New York at 15 cents, and schooner Lizzie M. Parsons, 571 tons, from Darien to New York with lumber at \$5.50; schooner W. T. Donnell, 482 tons, from Fernandina with lumber to New York on private terms. No new foreign charters have been reported during the week from any of these ports.

Mobile.

[From our own Correspondent.]
Mobile, Ala., November 17.

During the past week the movement in timber and lumber has been fairly active,

and the general trade of the port is showing up very favorably. Within the past fortnight thirty-nine foreign vessels have arrived in port, not including coastwise vessels. The lumber and timber trade has suffered considerably from the low water in the rivers, causing a short supply of logs for the mills here. A large number of rafts of logs are in the rivers above ready to be floated as soon as there is sufficient water. Few of the mills here have more than a week's supply of logs, and some have no stock at all. The market for sawn timber still continues very steady, with sales during the week of various averages at 17½ to 18 cents per cubic foot. Stocks of hewn timber are light, and last sales reported were at 17 cents. In lumber, River Plate cargoes were booked last week at \$12, few, however, being closed at that figure. The mills at adjacent points in Alabama and Mississippi are running on full time, and the demand is very satisfactory. Inquiries from North Atlantic ports are coming in more freely, and there is a fair demand from Cuba and from Mexican ports. Last week the following cargoes were cleared from this port: Steamer Peerless for Liverpool with 14,116 cubic feet of hewn timber; steamer Boxgrove for The Tyne with 63,376 cubic feet of sawn timber, 13,761 cubic feet of hewn timber and 910,000 feet of lumber; steamer Falcon for Hamburg with 137,989 cubic feet of sawn timber; steamer Fort Morgan with 20,000 feet of lumber, and steamer Hispania with 45,000 feet for Bocas del Toro; steamer Hiso for Havana with 604,609 feet of lumber, and steamer Sattwell for Coatzacoalcas with 362,145 feet. Messrs. Fred. O. Howe & Co. of Pensacola report the freight market as follows: "Pitch pine sail freights continue dull, with free offerings of tonnage and few orders. We quote for U. K. or Continent, 82s. to 90s.; Mediterranean, 80s. to 82s. 6d., and Baltic, 90s. To South America rates are \$10 to \$10.25, Buenos Ayres; \$11 to \$11.25, Rosario, and \$11 to \$11.50, Rio de Janeiro. Steam freights are dull at 80s. to 82s. 6d., Continent and U. K." Charters reported last week were as follows: Norwegian bark Pioneer, 892 tons, from Pensacola to the United Kingdom with timber at 85; British ship Rhone, 1618 tons, from Pensacola to London with timber at 90; Norwegian bark Siva, 1039 tons, from Mobile to Montevideo with lumber on private terms, and Norwegian bark Absalom, 915 tons, from Pensacola to Rio Janeiro with lumber on private terms.

New Orleans.

[From our own Correspondent.]
New Orleans, La., November 17.

The week under review has been strictly a convention week in the Crescent City, and thousands of visitors have been taking in the various sites and witnessing the industrial and commercial improvements completed and those now under construction in this city and suburbs. Among the many visitors lumbermen have been largely in evidence, visiting the city on pleasure, while at the same time having an eye to business. This industry is decidedly flourishing in every department, and the indications for a liberal volume of business during the winter months are encouraging. Manufacturers of yellow pine are having their innuings, and the domestic demand for lumber is now all that can be desired. Saw-mills at adjacent points in Mississippi and throughout this State have all the business they can handle, and shipments are sometimes delayed by a shortage of cars, but during the past week cars have been more plentiful, and shipments from the ports, both foreign and domestic, are moving freely. The cypress market is without doubt in a first-

class condition, manufacturers being well satisfied with the situation. The volume of trade in cypress compared with same period last year is from 10 to 15 per cent. better. Mills are all supplied with orders, and while stocks are light, they are generally well assorted. The demand for cypress from the West is now very decided, and for this class of trade manufacturers are well equipped. The Eastern demand is mostly for thick rough lumber, and the good drying weather now prevailing will soon increase Eastern shipments. As to prices, the general list is firm and hardening, and each new list issued during this year has shown an advance over the previous one. The export demand for lumber and staves has been fairly active, as freight rates have recently been favorable, but on account of the scarcity of dry stock shipments are moderate. Prices of pitch pine timber are firm and higher, and for all hardwoods are very steady, and for plain and quarter-sawn white oak, walnut and poplar values are firmer. Export conditions generally are more favorable, and the demand from European ports is better than for sometime past.

Beaumont.

[From our own Correspondent.]
Beaumont, Texas, November 17.

Prices on yard stocks have been off through Texas for the past thirty days, though the tie and timber end of the business continues as good as the most exacting could expect. The tie and timber demand for the past three years has been a most remarkable thing, and the constant predictions that it would eventually let up in three or six months have all been proven unwarranted, and the same full-blast railroad construction work is evidently ahead now. The yards throughout Texas cannot be said to be well stocked, though the owners of them do not seem to want to stock up at the present, either. They seem to think that there will be a weakness in the market, and they want the advantage of it. Then, too, the approach of winter is cutting a figure in the trade.

Lumber Notes.

Carolinas Pine & Hardwood Co. of Clio, S. C., is ready to make contracts for lumber. It will want 1,000,000 feet of oak, 1,000,000 feet of pine and 500,000 feet of red gum.

The Roscoe Lumber Co., with headquarters at Roscoe and Stanton, Texas, has been chartered, with a capital of \$25,000. The incorporators are John C. Ham, John S. Cordhill and Albert C. Willis.

The Clyde steamer Carib cleared last week from Jacksonville for Boston with 300,000 feet of lumber and 2000 cross-ties, with other cargo, and schooner Warren Adams for New York with 14,237 cross-ties.

Operations will begin about December 1 next in the new furniture factory which has been in course of erection in Huntington, W. Va., for several months past. A large force of workmen will be employed.

It is stated that Chicago Mill & Lumber Co. of Cairo, Ill., has purchased the interests of Fuller Bros. at Marked Tree, Ark. The property involves saw and planing mills, timber lands, etc., including 125,000 acres of cottonwood timber land.

S. C. Dowell, a real-estate man at Walnut Ridge, Ark., has sold the timber off 2000 acres of land near that place. A large wagon factory from the North will put in a plant between Walnut Ridge and Hoxie, which will employ 300 men the year round.

The Huntington Mills of Huntington, Fla., have bought the cooperage works

at that place formerly owned by the Palatka Cooperage Co., and are now operating the plant most successfully, having a full supply of orders for syrup and fish barrels.

The Moore Lumber Co. of Washington, N. C., has been chartered, with a capital stock of \$50,000. The company proposes to manufacture shingles, lumber and building material. The incorporators are S. F. Freeman, M. W. Hassell and Larry S. Moore.

The Deckers Creek Lumber Co. of Oliver, W. Va., has been chartered, with a capital stock of \$50,000. The incorporators are A. C. Oliver of Morgantown, W. Va.; C. J. Duncan, W. G. Buterbaugh, D. S. Buterbaugh and M. E. McNeal of Windber, Pa.

Messrs. Keith, Simmons & Co., 300 College street, Nashville, Tenn., will soon be in the market for twenty to thirty cars of five-inch heart cypress shingles for delivery at Chickamauga, Tenn.; also for a large quantity of one-and-one-half-inch pine laths, and flooring.

The Willingham Lumber Co. of Chattanooga, Tenn., it is stated, will double the capacity of its plant in that city. A new addition 28x90 feet and two stories high has recently been erected, which will be supplied with machinery and planers on the first and second floors.

It is stated that the Nashville Spoke & Handle Co. of Nashville, Tenn., has been absorbed by the International Axe & Tool Co. The Nashville Company does an annual business amounting to about \$200,000. The plant is valued at \$30,000, and the daily output is from 7000 to 10,000 dozen handles.

The demand for timber lands in Mississippi was never more pronounced than at present. Yellow pine and hardwood lands have within the past sixty days shown material advances in price. A tract of 550 acres of yellow-pine and hardwood land changed hands a couple of weeks ago for a consideration of about \$75,000.

The Martin Wane Co., Ltd., of Lake Charles, La., which was incorporated recently with a capital stock of \$50,000, has begun actual operation on its tramroad, which will be six miles long. The company is opening up a forest of virgin pine in which there is a ten years' supply in sight. Particular attention is to be given to the preservation of saplings.

A deal was closed at Memphis, Tenn., last week for the purchase of ten acres of land in that city by the Guirl Lumber Co. of Clay City, Ind., on which to erect a large plant for the manufacture of wagon-stock material and finished lumber. The plant will have a capacity of 30,000 feet of lumber per day. To supply the plant the company has bought 30,000 acres of timber lands in the delta, and a number of men will be employed to get out material for the factory.

The Smith-Isburg Lumber Co., previously reported as incorporated in October, 1902, for doing a general lumber business, was under later advices incorporated at Boston, Mass., in June, 1901. The principal offices of the company were moved to Birmingham in July, 1901, the Boston office being retained, which is now in charge of Karl Isburg, secretary and general manager for New England. The officers of the company are E. V. Smith, president; John J. Kyser, treasurer, and Karl Isburg, secretary.

The construction of the factory of the Nashville Hardwood Flooring Co. began last week at Nashville, Tenn. At present the new company will erect three large buildings and eight dry-kilns. The new plant will be in operation within three or four months, and will employ at the start

about 100 hands. At a meeting of the stockholders held last week John B. Ransom was elected president of the company; W. K. Phillips, vice-president, and Arthur B. Ransom, secretary and treasurer. These three and McEwen Ransom and John W. Love will be the directors.

Work was commenced last week on the large plant of the firm of E. A. Gillette Bros. in Memphis, Tenn. The factory will manufacture hickory dimension stuff for carriages and vehicles, and all the product will be shipped to Boston. The plant will have a capacity of 10,000 feet of lumber per day, and over fifty men will be employed in the factory alone. The machinery from the company's mill at Prescott, Ark., and from the mill at Fitzhugh, Miss., is being removed to Memphis, and the plant now to be completed will be a combination of these two mills.

A party of forty men from Washington, D. C., working under the direction of the bureau of forestry, arrived in Beaumont, Texas, on the 13th inst. The party came at the solicitation of the Kirby Lumber Co., and will spend six months in the pine forests of the company north of Beaumont for the purpose of making a working plan of the timber lands owned by the Kirby Lumber Co. The foresters will survey the lands, estimate the amount of timber thereon and define rules by which to log the tract in order that there may be a perpetual supply of long-leaf pine timber.

The announcement was made last week at Jacksonville, Fla., of the consolidation of the C. P. Rogers Co. and the Florida Grocery Co. The company to be organized will be known as the Consolidated Grocery Co., and will handle the grocery business for the Consolidated Naval Stores Co. It will be capitalized at \$500,000. The company will have its headquarters at Jacksonville, and branch depots in Savannah, Tampa, Pensacola, and probably Mobile and New Orleans. The officers of the company are C. P. Rogers, president; W. A. Gallaher and E. A. Champlain, vice-presidents, and O. H. Hodgson, secretary and treasurer.

Foresters for Texas.

A special car engaged by the national bureau of forestry carried a party of foresters and student assistants November 10 from Washington, D. C., to Kirbyville, Texas, to make a working plan for the management of 1,250,000 acres of long-leaf pine lands owned by the Kirby Lumber Co. The party went to St. Louis, and thence to Kirbyville, where the thirty-six men in the party were divided into four camps. One permanent camp was established at Kirbyville; the three other camps will move from place to place, wherever the work takes them. Each camp is in charge of an expert forester. The entire work is directed by Thomas H. Sherrard, an expert on Southern pines. Dr. A. D. Hopkins of the division of entomology will make, in co-operation with the bureau of forestry, a special study of insects on the Kirby Company's timber lands. The present undertaking is begun in response to the request of the Kirby Company that its timber lands be put under such management that they will yield a steady supply for its lumber mills. The working plan will be the most extensive and elaborate ever made in this country for a lumber company. The work will occupy about forty men for six months. All field expenses of the party will be borne by the Kirby Lumber Co.

It is announced that a coterie of leading business men of Beaumont, headed by ex-Governor Hogg, will charter a car and make a trip through New England for the purpose of enlightening that section about Texas.

PHOSPHATES.

Phosphate Markets.

Office Manufacturers' Record,
Baltimore, Md., November 19.

While the local market for phosphate rock continues quiet, the movement at sections throughout the Southern phosphate belt shows an increased activity, both in mining operations and shipments from the ports. In Florida the shipments are unusually heavy, both domestic and foreign. Prominent companies in the land-pebble section are working their plants to the utmost capacity, and at present the situation is reported much more satisfactory to miners. Prices continue very steady, and the inquiry from Europe better. In the hard-rock section miners are also actively engaged, and the shipments from the ports, like pebble, are heavy. Advices from Europe are more favorable. La Phosphate de Paris, in its issue of November 5, says: "The industry of chemical products finding itself, on the whole, regularly supplied by contracts in course of execution, buyers are less inclined to listen to rumors of an advance. However, there is nothing indicating to us that the firmness of the phosphate market should be ephemeral. On the contrary, indications are rather in favor of a still more accentuated advance of the market. Buyers will act wisely by assuring themselves now of the merchandise for delivery in the future. If there is room, in fact, to fear for the present, a more or less violent fluctuation, on the other hand there is nothing to oppose a progressive advance which may be susceptible at a given moment of having a sensible difference between the prices which will prevail in a year or two hence and the really advantageous prices at present given." The phosphate market in Tennessee is reported fairly active, with a moderate domestic and better foreign demand. At Mt. Pleasant all the mines are working, and under favorable weather conditions shipments for December will likely be of better volume. Foreign shipments so far during November have been quite heavy from Pensacola, 9000 tons having been cleared from that port last week. The tone of the market at Mt. Pleasant for both domestic and foreign rock is stronger. South Carolina miners are fully engaged, and the market for rock in that section continues steady, with a moderate inquiry. The only charters reported last week were the German steamer Carl, 2153 tons, from Tampa and New Orleans to Bremen and Stettin with general cargo and phosphate on private terms, November, and the steamer Dorothy, 1629 tons, from Port Tampa to New York with phosphate on private terms.

Fertilizer Ingredients.

The tone of the ammoniate market is quiet, while prices throughout the list are generally firm. Stocks in Western packers' hands are light, and firmly held at outside figures. There is a moderate demand from both Eastern and Southern buyers.

The following table represents the prices current at this date:

Sulphate of ammonia (gas)...	\$2 97 1/2 @ 3 00
Nitrate of soda, spot Balto...	1 90 @ 2 00
Blood	2 55 @ 2 57 1/2
Azotine (beef).....	2 55 @ 2 57 1/2
Azotine (pork).....	2 55 @ 2 57 1/2
Tankage (concentrated).....	2 37 1/2 @ 2 40
Tankage (9 and 20).....	2 52 1/2 @ 10 2 55 & 10
Tankage (7 and 30).....	21 00 @ 21 50
Fish (dry).....	30 00 @ 32 50

Phosphate and Fertilizer Notes.

The shipments of Tennessee phosphate rock from Pensacola, Fla., last week were 3100 tons to Genoa, 2200 tons to Bordeaux and 3300 tons for Bremen.

The Alachua (Fla.) Warehouse Co., which filed articles of incorporation last

week, will build a fertilizer factory. It has awarded contract for erection to R. N. Hall of Gainesville, Fla.

The steamship Almwick cleared last week for Rotterdam with 1617 tons of high-grade Florida phosphate rock among her cargo, and the steamship Cayo Blanco for Bremen with 2047 tons and other cargo.

The Atlantic Fisheries Co. of New York, which operates a large plant at Old Brunswick, on Cape Fear river, will erect at once at a cost of \$50,000 a fish factory at Beaufort, N. C. The site selected is the Christopher De Lamar Jones Island, just off Beaufort harbor.

The Baltimore Fertilizer Co. of Baltimore was incorporated on Tuesday last for manufacturing fertilizers. The capital stock is \$15,000, and the incorporators are H. Scott Roop, Newton S. Watts and Christian Rodekurt of Baltimore, and E. Oliver Grimes, Jr., and William T. Wilson of Westminster, Md.

The ninth annual meeting of the National Fertilizer Manufacturers' Association was held last week at Nashville, Tenn., with forty-six members from the various States present. Mr. George Braden, president of the association, presided. The executive committee held a session at 10 o'clock. The regular business was transacted, after which an adjournment was taken until 3 o'clock in the afternoon. The first business in the afternoon was the election of officers for the ensuing year: Mr. George Braden of Louisville, Ky., president; C. H. McDowell, Chicago, vice-president; C. A. Ailing, Chicago, secretary and treasurer. The appointment of the executive committee was left to the president. The convention recommended the establishment of an experimental garden or farm, where various crops could be planted, at the World's Fair in St. Louis, for the purpose of showing the advantages obtained from fertilizer. Louisville was selected as the meeting-place for 1903, and an invitation was accepted for 1904. Twenty-two new members were admitted.

State Auditor W. Q. Cole of Mississippi, in a speech to visiting bankers and manufacturers of Chicago at Jackson, presented some figures showing the advance made during the past three years by Mississippi. The assessed values of property have increased \$52,713,217, and the State tax levy has decreased half a mill. Railroad mileage has increased 285 miles. A million-dollar Statehouse has been nearly completed without resorting to a million-dollar bond issue authorized by the legislature, while \$400,000 of 5 per cent. bonds have been called in and cancelled five years before they were due. Appropriations for educational purposes have increased \$696,798, or nearly 60 per cent. The number of State and private banks has increased from 92 to 129.

It is announced by the Cincinnati Inquirer that a syndicate of Eastern, Chicago and Duluth capitalists has closed a deal for 100,000 acres of mineral and timber lands in Eastern Kentucky, and has options on 300,000 or 400,000 more, and that the extension of three large railroad systems into the Big Sandy region, where these lands lie, will facilitate the development of iron and coal deposits and the timber.

Two expert engineers from Paris, France, representing a coal syndicate, are making an inspection of coal properties in West Virginia.

It is thought that work necessary to make the Ocmulgee river navigable to Macon, Ga., may be done during the present fiscal year.

MECHANICAL.

Hollow Concrete Blocks.

The value of air insulation is well known; as an insulator it is one of the best. Properly arranged for electricity, heat, cold and moisture, it is a good non-conductor.

Of this fact advantage has frequently been taken in the construction of build-

having an insulation of air between inner and outer walls of concrete.

Mr. Palmer's first experiments were not successes, and owing to the irregularity of design, some of the earlier buildings constructed of hollow concrete failed.

Today the machines turn out regular-sized blocks 6x10x32 inches, forming walls ten inches thick, costing, it is claimed, eleven cents per superficial foot, and it is further stated by the manufacturer that

A machine with which the blocks are fashioned and the blocks themselves in a corner construction, illustrating them best, are shown in the accompanying engravings.

Morehead Return Trap.

The condensation from any steam heating or cooking apparatus must be removed. The more quickly the condensation is removed the drier and more effective will be the heating surfaces. It is extravagance to waste it, since it is pure water, and hot. The most effective way to utilize the heat it contains is to deliver it into the boiler before it vaporizes. This condensation may be quickly and economically handled with a return trap.

The Morehead return trap is constructed of steel, the heads and longitudinal seams being closely riveted and calked to withstand any pressure carried on the boiler without breaking. It is simple in construction, there are no rubber joints to

having an efficiency of 65 per cent, and an evaporation of 6000 pounds of water per hour from and at 212° under average conditions, the saving effected by a Morehead return trap for a year is said to be more than twice the cost of installing a trap large enough to handle such a plant.

The Morehead trap is said to consume less than ten pounds of steam per horsepower. Pressure is admitted to the surface of the water and is automatically shut off before the tank is empty. The steam used is only such as is condensed by the latent heat passing from it into the water in the tank, which is all put back into the boiler.

The manufacturer claims that a Morehead return trap requires practically no attention; needs no lubrication; will not race or run away; never sticks; is noiseless; requires little room and no foundation.

The American Blower Co., Detroit, Mich., is the maker of this trap.



FIG. 1—MACHINE FOR MAKING HOLLOW CONCRETE BLOCKS.

ings, and some space has been left between the inner and the outer walls.

Concrete has received experimental attention as a building material for about twenty-five years. This is an ancient building material recently revived. The ruins of Italy, Roman viaducts and some of the greatest works of ancient times stand today as when fashioned by these early makers—intact. They were built of concrete, and are impervious to time and destroying elements.

these blocks have been tested and have stood a crushing strength equivalent to a wall 1300 feet in height.

Skyscrapers seem possible with concrete under these circumstances without a skeleton of steel, and are impervious to the enemy of steel construction, rust.

The machines make these blocks in any pattern, to fit the steel beams, uprights and girders of buildings, concealing or paneling with the same, and may be turned out in lengths from eight to fifty-

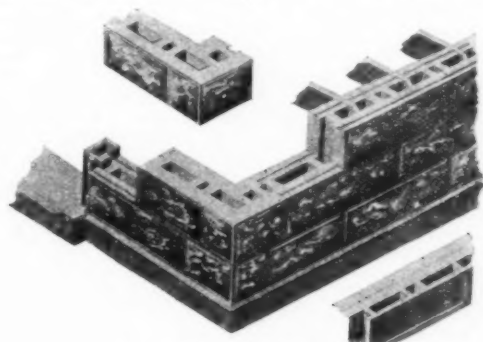


FIG. 2—BUILDING BLOCKS.

Harmon S. Palmer, Columbia Building, Fourteenth and Mt. Pleasant streets, Washington, D. C., has worked on concrete and its application to home-building continuously for the last twenty years. Mr. Palmer early came to the conclusion that, owing to the great strength of Portland cement, walls of solid concrete were unnecessary, and that better results were obtainable by hollow construction.

He then evolved the idea of building machines to make hollow concrete blocks, realizing the advantages to be gained by

four inches. Any color or any finish is possible. It is said to be difficult to distinguish between these blocks of concrete and smooth or rough dressed stone, according to the finish imparted to the blocks, smooth or rough.

For strength, durability, beauty, economy and sanitary qualities it seems difficult to locate a more satisfactory building material than this.

Harmon S. Palmer, president of the H. S. Palmer Building Block Co., owns the patents on these machines.

blow out or leak, and only one valve; this is on the inside. All working parts are on the outside, in plain sight and easily accessible.

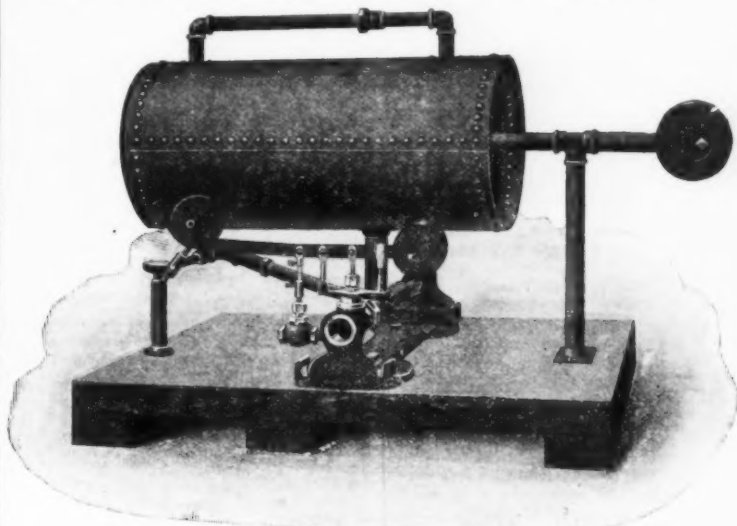
This trap is located six feet or more above the water line of the boiler. The water from the condensing surfaces is forced by the pressure of steam from behind through a pipe leading to the trap, with a swing check valve close to the latter. As soon as sufficient water has entered the receiver to overcome the weight on the arm the receiver tilts down, allowing water to pass through the discharge pipe, at the same time opening the steam valve, which has a pipe connected with the dome of the boiler.

By equalizing the pressure on the surface of the water in the receiver with that in the boiler, the water, in simple obedience to the laws of gravity, flows into the boiler. As soon as the receiver is empty it tilts back as before, and again refills. The trap is prompt in opening and closing, its action being due entirely to gravity. It takes the water from the condensing surfaces whether they are above or below the water-level in the boiler and automatically returns it to the boiler at the temperature due to the pressure at which the steam is condensed.

It is said to be quick and positive in delivering water into the boiler, regardless of fluctuations of pressure. It supplies all the water needed in the boiler from the main water pipe, providing there is enough pressure on the main to lift the water to the trap, thus performing the duties of a pump or injector. It operates equally well with high or low pressure coils, or coils using exhaust steam, allowing no condensation to collect in them.

For a boiler plant of 200 horse-power,

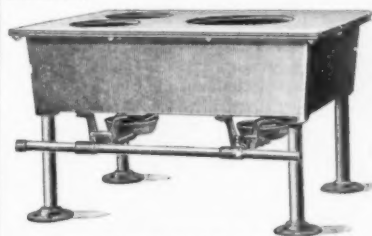
THE MOREHEAD RETURN TRAP.



The Nason Glue Heater.

In the accompanying illustration is shown a heater which has been designed by the Nason Manufacturing Co., 71 Fulton street, New York, for heating glue, paste, etc., and in which gas is employed for heating.

This heater is made in three sizes, and each size can be furnished with covers carrying various combinations of pots in sizes from five to twelve inches in diameter.



THE NASON GLUE HEATER.

The burners used are said to be of excellent design, and tests made have shown a high heating efficiency with an economical gas consumption.

Each heater is furnished with iron-pipe legs of proper height for bench use, or they can be equipped with legs of proper length for the heater to stand on the floor, where so required.

Where steam is not available the utility of this heater will be readily appreciated.

Solomon Lee of Guanapo street, Arima, Trinidad, B. W. I., writes to the Manufacturers' Record that he desires to get into communication with American manufacturers of paper and paper boxes, and to obtain from them samples, quotations, terms, etc.

CONSTRUCTION DEPARTMENT.

THE MANUFACTURERS' RECORD seeks to verify every item reported in its Construction Department by a full investigation and complete correspondence with everyone interested. But it is often impossible to do this before the item must be printed, or else lose its value as news. In such cases the statements are always made as "rumored" or "reported," and not as positive items of news. If our readers will note these points they will see the necessity of the discrimination, and they will avoid accepting as a certainty matters that we explicitly state are "reports" or "rumors" only. We are always glad to have our attention called to any errors that may occur.

*Means machinery, proposals or supplies are wanted, particulars of which will be found under head of "Machinery, Proposals and Supplies Wanted."

In correspondence relating to matters reported in this paper, it will be of advantage to all concerned if it is stated that the information was gained from the Manufacturers' Record.

It often occurs that the organization of a new company in a town is not known by the postmaster, and hence letters addressed to the company are returned marked "not known." The Manufacturers' Record reports the first organization of all companies, and our readers, in seeking to get into communication with them, should be very careful in deciding how to address them, and it is often advisable to add the names of one or more incorporators as an aid to the postmaster in delivering mail.

ALABAMA.

Birmingham—Mercantile.—Alabama Brokerage Co. has been incorporated, with capital stock of \$25,000, and S. E. Wilbourne, president.

Birmingham—Music and Furniture.—Chartered: Carter Music & Furniture Co., capitalized at \$25,000, with Gilbert Carter, president, and T. L. Carter, manager.

Birmingham—Steam-heating Plant.—Birmingham Railway, Light & Power Co. will at once begin construction work on mains and plant extensions to supply steam heat for houses in the city business district. It is said \$100,000 will be expended.

Birmingham—Machine Shop.—Republic Iron & Steel Co. will rebuild its machine shop recently burned. New plant will include 50x100-foot building and complete equipment of machinery.

Birmingham—Brick Works.—H. P. Tissler, H. R. Dill and V. L. Allen of Birmingham and L. A. Cullen and H. J. Tissler of Selma, Ala., have incorporated Birmingham Sand Brick Co., with capital stock of \$10,000, and will establish plant.

Deposit—Cotton Gin.—J. E. McCaleb expects to rebuild his burned cotton gin.

Gadsden—Gas Plant.—Gadsden Light, Coal & Ice Co. has obtained franchise for the construction of a gas plant.

Gadsden—Water-works.—City has granted franchise to R. A. Mitchell and associates for the construction of a system of water-works.

Gurley—Coal Mines.—Thomas Gurley and William Vincent have begun development of coal mines near Gurley.

Henryellen—Coal Mines.—Tennessee Coal, Iron & Railroad Co. (offices at Birmingham) has begun work on developing its coal properties near Henryellen. A daily output of 1500 tons will be provided for.

Iron City—Iron Mines.—Muscadine Mining Co., organized some months ago, is proceeding with the development of its iron properties, and is completing improvements for plants at a cost of \$200,000. L. B. Miller of Cleveland, Ohio, is president and general director.

Jacksonville—Cotton Mill.—It is proposed

to form \$200,000 company for the erection of a cotton factory. J. L. McComb of South Carolina is said to be the promoter.

Leeds—Coal Mines.—Tunnel Coal Co. (offices at Birmingham) has purchased 5000 additional acres of coal lands adjacent to the coal lands it is now developing. It is said \$175,000 was paid for the new tract.

Montgomery—Electric-power Plant.—Merchants' Light & Power Co., reported recently as to build \$100,000 power plant, has appointed Ludwig & Co., 513 Empire Building, Atlanta, Ga., as consulting and supervising engineers in charge.

Morgan County—Timber Lands.—Meyer & Spencer of New Decatur, Ala., have purchased 1000 acres of timber land in Morgan county.

Valley Head—Coke Ovens.—Valley Iron Co. (offices at 204 First avenue, Birmingham) has let contract to R. A. Patten & Co. of South Pittsburg, Tenn., for construction of the 300 coke ovens recently reported.

ARKANSAS.

Buffalo—Lead and Zinc Mines.—Chicago-Buffalo Zinc & Lead Co. has been organized, with capital stock of \$1,000,000, and will develop lead and zinc deposits on 2500 acres of land. Henry T. Bule of Buffalo is president, and M. E. Merritt of Chicago, Ill., secretary.

Hot Springs—Bridge.—A bridge will be built across the Ouachita river by Garland county. Plans and specifications will be prepared soon, and ten bids will be asked. For information address "County Commissioners."

Knoxville—Coal Company.—Incorporated: Knoxville Anthracite Coal Co., capital stock \$4000, with A. M. McKennan, president; T. B. May, secretary, and R. A. Rogers, treasurer.

Little Rock—Soap Factory.—Board of Trade is negotiating with Missouri manufacturers for the establishment of a soap factory.

Little Rock—Mercantile.—L. P. Cummins, A. E. Cummins, Jos. H. Luckett, Charles M. Erek and Thos. M. Scruggs have incorporated Cummins-Luckett Company. The capital stock is \$35,000.

Marmaduke—Flour Mill.—Farmers' Milling Co. will remodel its flour mill to the sifter system and add corn rolls. Contracts for machinery not let.

Walnut Ridge—Wagon Factory.—A Northern company will establish a wagon factory. A tract of 2000 acres of timber land has been purchased from S. C. Dowell to supply the plant.

FLORIDA.

Alachua—Fertilizer Factory, Ice Plant, etc. Alachua Warehouse Co., reported incorporated last week, will build and equip fertilizer factory. R. N. Hall of Gainesville, Fla., is the contractor. Wood Ward of Jacksonville, Fla., is the engineer in charge. Company contemplates installing ice and cold-storage plant next year.*

Bartow—Electric-light Plant, etc.—City has voted proposed \$15,000 bonds, recently mentioned, to establish electric-light plant, construct sewerage system, etc. Address "The Mayor."

Brooksville—Electric-light Plant, etc.—Standard Pole & Tie Co. has received franchises for electric lighting and telephone system, and will build plants.

Jacksonville—Tobacco Manufacturing, etc. James B. Porter, Paul R. Wiggs and Charles W. Bartleson have incorporated J. R. Porter Co., with capital stock of \$50,000, for manufacturing and dealing in tobacco, etc.

Jacksonville—Mercantile.—Consolidated Grocery Co. will be incorporated, with capital stock of \$500,000, and C. B. Rogers, president. It will consolidate C. B. Rogers Co. and Florida Grocery Co. with the grocery department of Consolidated Naval Stores Co.

Jacksonville—Lumber Manufacturing, etc. Incorporated: American Lumber & Export Co., with capital stock of \$15,000, to manufacture and deal in lumber, etc., for export principally; B. F. Camp of White Springs, Fla., president; R. J. Camp of Franklin, Va., vice-president, and Fred Larkins of Jacksonville, secretary.

Tallahassee—Planing Mill.—King Lumber Co., reported recently as erecting a planing mill, has incorporated, with capital of \$5000. All contracts for building and machinery have been awarded. Company also will operate a saw-mill at Wakulla, Fla.

Tampa—Shipbuilding Plant.—Tampa Steam Ways Co. has been incorporated, with capital stock of \$50,000, for building and repairing vessels, etc. John Miller is president; Peter O. Knight, vice-president, and R. A. Crowell, general manager. Company has acquired and will continue the Tampa Steam Ways, and will make improvements, add new machinery, etc.

GEORGIA.

Atlanta—Clothing Company.—Incorporated: Chas. S. Kingsberry Company, capitalized at \$50,000, by Chas. S. Kingsberry, William W. Comey and Henry F. McConnell.

Augusta—Levee Construction.—City has authorized a loan of \$100,000 to be expended for the construction of levees on the river front. Address "The Mayor."

Blue Ridge—Gold Mine.—H. C. Robinson of Cincinnati, Ohio, will develop the Coosa gold properties in Union county. He has let contracts for an equipment of modern machinery, and is now installing the plant. It is said \$18,000 is being expended.

Clarksville—Orchards.—John Keller, W. P. Furr and J. H. Hicks have incorporated Blue Ridge Orchard & Nursery Co., with capital stock of \$10,000. They have bought 1000 acres of land, whereon they are planting nursery stock and preparing for orchards.

Dahlonega—Gold Mines.—Griffin & McDonalds will develop for gold on lands near Dahlonega.

Ellijay—Woodworking Plant.—John B. Newton, John Frantz, James Bewley and W. W. Neal, all of Knoxville, Tenn., and A. A. Towers of Ellijay have incorporated Towers Pin & Bracket Co., with capital stock of \$10,000, to continue an established woodworking plant.

Gainesville—Water-power Plant.—North Georgia Electric Co. has purchased Overby shoals, a water-power property near Gainesville, and intends to develop in the future.

Hawkinsville—Electric-light Plant.—Hawkinsville Cotton Mills has purchased Lyons & Renfro's electric-light plant, and contemplates enlarging same.

Hawkinsville—Cotton Mill.—Hawkinsville Cotton Mills will add sixty looms.*

Holly Springs—Gold Mine.—Isaac B. Naylor of Philadelphia, Pa., has purchased the La Belle gold mine, and will develop same. A new modern plant will be installed.

Milledgeville—Mercantile.—Incorporated: Reid, Cooper & Watson Company, capitalized at \$8000, by G. G. Reid, G. W. Cooper and W. E. Watson.

Winder—Water-works.—City contemplates issuing \$35,000 in bonds for the construction of water-works. Address "The Mayor."

KENTUCKY.

Barbourville—Oil Wells.—Chartered: South Drilling Co., capital \$10,000, by Taylor South, James Fitzpatrick and O. C. McClung, to drill for oil.

Catlettsburg—Tug Company.—Chartered: Tug Transit Co., with \$10,000 capital stock, by J. C. Hopkins, P. S. Marcum and G. F. Adams.

Frankfort—Gas and Oil Wells.—Chartered: Sage Valley Oil & Gas Co., with \$2500 capital stock, by C. R. Scott, W. B. McClure and J. W. Scott.

Harrodsburg—Electric-light and Water Works.—City has voted issuing \$18,000 in bonds for construction of electric-light plant, present one being worn out; also \$48,000 in bonds to buy and extend the local water-works. Address "The Mayor."

Lawrenceburg—Water-works.—City contemplates constructing a system of water-works. Address "The Mayor."

Madisonville—Electric-light Plant.—City contemplates issuing \$20,000 in bonds for the construction of an electric-light plant. Address "The Mayor."

Madisonville—Lead Mines.—A. M. Hulet has purchased and will develop the Felix Cox lead properties and other lands near Madisonville; price paid said to be \$20,000.

Mayfield—Woolen Mill.—Henry D. Hale, W. S. Cook and G. O. Duncan have incorporated Old Woolen Mills Co., with capital stock of \$100,000, to establish plant.

Mayfield—Trousers Factory.—Merit Pants Co. has changed name to Merit Manufacturing Co., increasing capital stock from \$100,000 to \$160,000.

Paducah—Distillery.—A. Sidney Terrell

will establish a distillery. He is erecting building, and has purchased machinery. About \$50,000 will be invested.

Pulaski—Land Company.—Incorporated: Burnside Land Co., \$5000 capital stock, by C. W. Cole, R. F. K. Cole and J. K. Cole, all of Cincinnati, Ohio.

Seabee—Water-works.—Reports say the city will issue \$25,000 in bonds to construct the water-works recently mentioned as contemplated. Address "The Mayor."

Winchester—Woodworking Plant.—Reliance Manufacturing Co. will build a wood-working plant. Geo. E. Tomlinson is engineer in charge.*

LOUISIANA.

Lake Charles—Timber Developments.—Martin Wane Co. has been incorporated, with capital stock of \$50,000, and begun development of timber lands.

Lake Charles—Brick and Tile Works.—Southwestern Brick & Tile Co., reported incorporated with \$25,000 capital recently (under New Orleans), has sixty-four acres of clay lands at Lake Charles, and will there erect its plant. Arrangements are being made to have plant ready for operation by January 1. L. A. Atzenhoffer of New Orleans is secretary.

MARYLAND.

Baltimore—Shirt Factory.—E. Rosenfeld & Co. have let contract to E. M. Noel at about \$70,000 for erection of building for their new shirt factory. Structure will be six stories high, 77x129 feet, fireproof, have elevators, etc.

Baltimore—Mining, etc.—Chartered: Mutual Mining & Milling Association, to purchase and develop mineral lands; incorporators, Robert Goode, Baltimore, Md.; Geo. W. S. Loucks, J. Frank Small, York, Pa., and Gardner W. Kimball, Wilmington, Del.; capital stock \$1,000,000.

Baltimore—Meat Packery.—Incorporated: The George Company, for killing, curing, packing and preserving of meats, etc. Josiah J. George, Oswald T. Shreve and J. L. Woodbury are the incorporators. Capital stock is \$50,000.

Baltimore—Boiler Works.—Incorporated: Plunkett Water Tube Steam Generator Co., with a capital stock of \$1000, for making water-tube boilers, by Michael H. Plunkett, Frederick W. Lipps, Frederick C. Seeman, Robert M. Jones and Joseph Henry Judik.

Baltimore—Granite Quarries.—Incorporated: Guilford Granite Quarry Co., with capital stock of \$20,000, by Samuel Oberndorf, Philip Meundlein, Frank Pumphrey and others.

Baltimore—Mercantile.—Incorporated: Medinger Company, by Franklin J. Benson, Romeo Espey, Sidney T. Nimmo, William F. Bates and Albert S. Medinger. The capital stock is \$10,000.

Baltimore—Electric-power Plant.—The purchase of the \$2,000,000 of common stock of the United Electric Light & Power Co. from the United Railways & Electric Co. by a syndicate acting through the Continental Trust Co. has been completed. For the stock, which constitutes the entire issue, \$900,000 is to be paid on or before January 15, 1903. This purchase practically assures the launching of the great Susquehanna river electric-power development project by the syndicate and referred to at different times during the past year. There are to be three developments that will cost between \$10,000,000 and \$12,000,000, and two years will be required to complete the work, the purpose being to supply motive power for the street-railway system of Baltimore, to supply electricity for lighting the streets and for general power and heating purposes.

Baltimore—Fertilizer Factory.—Incorporated: Baltimore Fertilizer Co., for manufacturing fertilizers, by H. Scott Roop, Newton S. Watts and Christian Rodekurt of Baltimore, E. Oliver Grimes, Jr., and William T. Wilson of Westminster, Md. The capital stock is \$15,000.

Baltimore—Wheel Factory.—Edward Stinson has obtained permit to erect building five stories high, 48x78 feet, to be equipped for manufacturing wheel materials. This replaces plant recently burned.

Baltimore—Biscuit Factory.—Maryland Biscuit Co., reported incorporated last week with \$250,000 capital, has bought Maryland Biscuit Co. and plant. Price paid is said to have been \$125,000. Extensive enlargements to the factory are in progress; office at 515 S. Charles street.

Baltimore—Lunch Room.—Incorporated: Belvidere Lunch Co., for conducting a lunch room, by Richard L. Smith, Stephen M. Broadbent, Henry W. Watkins, Louis Somers and Daniel V. Knight, with capital of \$800.

Baltimore—Real Estate.—Incorporated: Home Real Estate Co., by Moses Rothschild, Solomon Rothschild, Charles F. Diehl, Jacob M. Moses and Daniel M. Moses. The capital stock is \$5000.

Colorado—Fiber Works.—Robert Christie and associates contemplate forming company to establish fiber works. Over \$4000 has been subscribed.

Corriganville—Coal Mine.—Cumberland Basin Coal Co. of Cumberland, Md., has begun the development of coal mines near Corriganville.

Cumberland—Silk Mill.—Klots Throwing Co. (main mill at Scranton, Pa., and New York office at 487 Broadway) will erect a large mill at Cumberland. Building will be 80x230 feet. Extent of machinery not stated as yet.

Oakland—Coal Mining.—Incorporated: Upper Potomac Mining Co., capital stock \$20,000, by Russell S. Hubbard and Harris M. Damesman of Philadelphia, Pa.; W. McCulloch Brown of Corunna, Md.; Frederick A. Thayer and Edward H. Sincell of Oakland.

Washington, D. C.—Real Estate.—Chartered: Tyler & Rutherford, by Richard W. Tyler, Robert G. Rutherford and Charles G. Warden; capital stock \$50,000.

MISSISSIPPI.

Biloxi—Brick Works.—Chartered: Biloxi Brick Co., capitalized at \$30,000, with privilege of increasing to \$50,000, by W. K. M. Duke, L. Lopez, Jr., John Carraway and associates; purpose, to manufacture bricks.

Gulfport—Brick Works.—A \$35,000 stock company is being organized to establish plant for manufacturing bricks from white beach sand. Names of interested parties not stated yet, but possibly J. H. Bouslog can give information.

Scranton—Electric-light and Water Works. L. S. Anderson of Moss Point, Miss., has optioned the municipal water and light plant, intending to complete the purchase and organize a company to enlarge and improve the systems.

Vicksburg—Cotton-batting Company.—Incorporated: Mississippi Valley Batting Co., capitalized at \$10,000, by J. E. Nelson, S. J. Shlenker and A. E. Bowen, to deal in cotton batting, etc.

Vicksburg—Paper Mill.—C. A. Michaels of Marion, Ind., writes that he and R. J. Spencer and F. W. Willson, also of Marion, have organized a company to build the paper mill recently reported as proposed by them. They will locate the plant in the South, but have not selected location. Paper will be made from canebrake pulp. Probably \$50,000 will be invested.

Welsh—Oil Wells.—Merchants' Oil Co. has been organized, with capital stock of \$500,000, and acquired lands on which to drill for oil. John C. Lee is president; F. G. Steve, vice-president, and Jacob L. Keller, secretary.

MISSOURI.

Carthage—Sand-machine Works.—Carthage Sand Machine Co. has been incorporated to manufacture sand machine for quarry use. Curtis Wright is secretary.

Kansas City—Bottling Company.—Incorporated: Eagle Bottling Co., capital \$10,000, by Abraham, Jacob and Bessie Rubenstein.

Macon—Coal Mines.—E. B. Clements and David B. Moore will develop coal properties.

Macon—Coal Mines.—W. E. McCully and T. E. Wardwell will develop coal properties.

Sainte Genevieve—Quarries, etc.—Incorporated: Ste. Genevieve Lime & Quarry Co., with a paid-up capital of \$100,000, by Philip M. Huecke, Philip Kolb, Alkman Welch, Geo. A. Held, John L. Bogy, F. L. Barada and James R. Waddill.

St. Louis—Real Estate.—Chartered: St. Louis Real Estate & Construction Co., with a capital of \$5000, by Will W. Hite, William Elias and John P. Wolf.

St. Louis—Plate-glass Company.—St. Louis Plate Glass Co. will increase capital from \$300,000 to \$1,500,000.

St. Louis—Chemical Company.—Incorporated: Missouri Medical & Chemical Co., with a capital of \$10,000, by E. A. Rowley, Frank H. Braden, George F. Lane, Lon Hendrick and Ira C. Young.

St. Louis—Mercantile.—Incorporated: Luyties Brothers Mercantile Co., with a capital of \$400,000, by Henry R. Luyties, August K. Luyties, Fred W. Luyties, Peter H. Feagan, John L. Lewis, Henry C. Coleman and William L. Kline.

St. Louis—Realty.—Incorporated: Terminal Realty Co., with a capital of \$100,000, by Julius S. Walsh, Julius S. Walsh, Jr., and Felix E. Anderson.

St. Louis—Asphalt Company.—Incorporated: Ravia Asphalt Co., with a capital stock of \$25,000, by Joseph L. Hanley, Frank H. Hamilton, Louis Barmelster and George A. H. Mills.

St. Louis—Vehicle Company.—Incorporated: St. Louis Wagon & Carriage Co., with capital of \$2500, by John Hennessey, Richard F. Anderson and William G. Murphy.

St. Louis—Shoe Factory.—Ver Steeg Shoe Co. will erect another shoe factory. Building will be 33x116 feet, to cost about \$50,000.

St. Louis—Electrical Construction.—Chartered: Missouri Electrical Construction Co., with a capital of \$2000, by Samuel G. Payne, Barton J. Parker and Hickman P. Rodgers.

St. Louis—Drug Company.—Chartered: Missouri Drug Co., with a capital of \$3000, by Harry A. Cramer, Henry W. Lee and H. Charles Lloyd.

St. Louis—Coal Mining.—Willis Coal & Mining Co. will increase its capital stock from \$125,000 to \$150,000.

St. Louis—Scenic Railway.—Incorporated: Elevated Whirling Scenic Railway Co., with capital of \$30,000, by Joseph St. Clair, Louis Wollbrinck and George H. Boeck.

St. Louis—Lumber Company.—Allen-Wadley Lumber Co. will increase capital from \$30,000 to \$75,000.

St. Louis—Chartered: Adams-Anderson Amusement Co., with a capital of \$100,000, by John Adams, Jr., James Anderson, George H. Rice, C. J. Wilson and J. H. Chapman.

St. Louis—Laundry.—C. & C. Laundry Co. has increased its capital from \$10,000 to \$20,000.

NORTH CAROLINA.

Andrews—Tanning-extract Plant.—Chartered: Cherokee Tanning Extract Co., with authorized capital stock of \$100,000, to manufacture extracts, etc. The incorporators are John I. Barker, Edwin G. Henemann and Andrews and Harry S. Stout of Charleston, W. Va.

Asheville—Paper and Pulp Mill.—Dispatches state that paper manufacturers of New York and Canada are negotiating for 72,000 acres of timber land near Asheville with the intention of utilizing same in the manufacture of pulp and paper. It is stated mills will be erected at Asheville. T. W. Kneeland of New York city is said to represent the projectors.

Bessemer City—Cotton Mill.—J. M. Torrence proposes organizing \$300,000 company to build his proposed cotton mill recently reported. A portion of the capital has been secured. Full details will probably be announced soon.

Concord—Electric-light Plant.—Rumors say that Burton & Scott of Richmond, Va., have obtained lighting franchise, and will erect electric plant at Concord.

Concord—Cotton Mill.—Magnolia Mills (J. M. Odell, proprietor) has been established, with forty-eight looms installed. Plant has room for 100 looms.

Gastonia—Cotton Mill.—Loray Mills has let contract for 25,000 spindles and 840 looms to complete its equipment; present equipment 25,000 spindles and 840 looms.

Gastonia—Flour Mill.—J. A. Butler has purchased an interest in the Morrow Flour Mills. He will enlarge and improve the plant, increasing its capacity to a considerable extent.

Greensboro—Bottling Plant.—D. R. Huffine will erect new brick building 100x85 feet for bottling plant. J. N. Longest has contract to erect building.

Hamlet—Cotton Compress.—It is stated the Seaboard Air Line will rebuild its cotton compress recently burned.

Hamlet—Ice Plant.—Hamlet Ice Co. will rebuild its burned ice plant. Capacity of new plant will be thirty tons daily.

Lexington—Chair Factory.—Unecda Chair Co. has organized, with capital stock of \$30,000, and G. W. Montcastle, president; J. F. Ward, vice-president; J. W. Boring, secretary. Contract has been let to J. W. Tussey for erection of buildings, and machinery for manufacturing 750 chairs daily will be installed.

Moravian Falls—Furniture Factory.—It is proposed to establish furniture works, and R. Dan Lewis is interested in the movement.

Owenby—Corn and Feed Mill.—W. W. Lot-speich will erect corn and feed mill.

Randleman—Flour Mill.—Pearl Roller Mills will rebuild plant recently burned. New mill will have daily capacity of from 75 to 100 barrels of flour. No contracts have been let.

Washington—Lumber Plant.—Incorporated: Moore Lumber Co., capital stock \$50,000, to manufacture lumber and timber, etc. The incorporators are S. F. Freeman, W. C. Hassell and M. W. Hassell of Washington, and Larry I. Moore of Greenville, N. C.

Washington—Electric Plant.—Stephen C. Brogan has obtained franchise for establishment of electric plant to supply light, heat and power.

Washington—Ice Plant.—Incorporated: Crystal Ice Co., with a capital stock of \$100,000, by W. A. Blount, W. Swindell, William Bragaw, H. B. Mayo and C. B. Sterling.

Wilmington—Tobacco Warehousing.—Chartered: Wilmington Tobacco Warehouse Co., capital \$100,000, by G. R. French, Gabriel Holmes, W. E. Worth, G. O. Gaylord, H. L. Vollers and W. R. Cooper.

SOUTH CAROLINA.

Abbeville—Furniture Factory.—Abbeville Furniture Manufacturing Co. will enlarge its factory, erecting an addition thirty-five feet long by two stories high and installing considerable new machinery. C. P. Hammond is treasurer.

Anderson—Cotton Mill.—Orr Cotton Mills will double its plant of 25,000 spindles and 700 looms. Probably about \$400,000 will be expended. James L. Orr is president.

Bennettsville—Tobacco Company.—Chartered: Marlboro Tobacco Warehouse Co., to cultivate and deal in tobacco, by A. J. Matheson, J. F. Breeden, C. S. McCall, Charles Crossland and J. T. Dudley. Capital stock is \$4000.

Charleston—Machine and Woodworking Shops.—The government will build joiner shops and machine shops at the Charleston navy-yard. Bids for the construction of the joiner shop buildings (of brick and steel) will be opened December 20. Bids for the machine shop buildings (also of brick and steel) will be opened on the same date. Appropriation is \$120,000 for each plant. For particulars and plans and specifications address Mordecai T. Endicott, chief of bureau yards and docks, Navy Department, Washington, D. C. He will open the proposals.

Cheraw—Electric-light Plant.—City council contemplates building an electric plant to light the city. Address "The Mayor."

Columbia—Machinery Supplies.—Chartered: Charlotte Supply Co., to deal in machinery supplies; capital stock \$30,000; H. C. Clark of Charlotte, N. C., president; J. S. Moore of Columbia, vice-president, and H. W. Eddy, secretary and treasurer.

High Point—Stone Quarry.—M. B. Smith & Son have begun the development of stone quarries.

Kershaw—Tobacco Cultivation.—J. T. Stevens, S. W. Heath, J. F. O'Brien and others have formed company, with capital of \$1500, to grow tobacco.

Lancaster—Live-stock Farm.—Chartered: Gregory-Ferguson Stock Farm, capital stock \$12,000, by W. T. Gregory and A. B. Ferguson.

Lando—Cotton Mills.—Manetta Mills has let contract for erection of additional building 75x350 feet in size. It is not stated what new machinery, if any, will be installed. Present equipment 7000 spindles.

Loris—Tobacco Warehousing.—Incorporated: Loris Tobacco Warehouse, capital stock \$3000, by J. C. Bryant, president, and D. W. Hardwick, secretary.

Ridgeway—Corn and Flour Mill.—Ridgeway Ginnery Co. contemplates erecting a corn and wheat mill, roller process.*

Stantonville—Cotton Mill.—It is reported that R. A. Lewis of Belton, S. C., and E. A. Smythe of Pelzer, S. C., will build a cotton mill near Stantonville.

Union—Cotton Mill.—T. C. Duncan and associates are preparing to complete arrangements for erecting the additional cotton mill recently reported as proposed. Details have not been decided yet.

Westminster—Cotton Mill.—Cheswell Cotton Mills Co. is reported as to erect a three-story building and install additional machinery; now has 11,000 ring spindles and 350 looms.

TENNESSEE.

Adams—Tobacco Factory.—The McMurry Company will establish a tobacco factory. Work has begun on erection of two-story building to receive the machinery.

Chattanooga—Axle Works.—John C. Twinn proposes organizing a \$50,000 stock company to establish works for manufacturing a patent revolving wagon axle.

Chattanooga—Shell-button Factory.—E. B. Bascom of Lansing, Iowa, is investigating relative to establishing shell-button factory at Chattanooga.

Chattanooga—Coal Mines, etc.—C. E. James, D. F. Beckham, T. B. Webster, H. H. Webster and W. T. James have incorporated

Hamilton Coal Co., with capital stock of \$100,000, to mine coal, erect coke furnaces, manufacture and deal in coke, etc.

Crossville—Coal and Iron Mines.—Crafford Coal & Iron Co., J. N. Baker, general manager, will arrange for the development of coal and iron properties. No engineer has been employed yet, and no contracts have been let.*

Falls City—Water-power, Electric Plant, etc.—Charles H. Fisk of Detroit, Mich., has purchased Great Falls Cotton Mills (4000 ring spindles and 130 looms), Caney Fork water-power, etc., for \$50,000; has also purchased White county side of falls for \$50,000. He intends to develop the power, operate the mill and erect a factory of some character, probably a plant for making electric-light carbons.

Hardison Mills—Flour Mill.—J. B. Wilhoite & Son of Wilhoite, Tenn., will erect a flouring mill, as was reported last week, at Hardison Mills. They will build for a daily capacity of seventy-five barrels of flour.*

Humboldt—Coal Deposits.—It is said coal deposits have been found on lands owned by T. C. Duffy.

Jonesboro—Flour Mill.—C. B. Gross contemplates changing his buhr flour mill to the roller system. No contracts let yet.

Knoxville—Brewery.—East Tennessee Brewing Co. will enlarge and improve its plant, plan for the betterment having been prepared by a Chicago architect.

May Spring—Flour Mill.—Samuel James of Jefferson City, Tenn., will build flour mill at May Spring. Plant will have daily capacity of fifty barrels and be operated by water-power. No contracts have been let.

Memphis—Car Works.—A \$250,000 stock company is being organized to establish a general foundry and car works. Daily output will be ten complete cars. Names of organizers not announced as yet.

Memphis—Lumber Plant.—Guirl Lumber Co., W. H. Guirl, president, Clay City, Ind., has purchased site at Memphis and will erect lumber plant with daily capacity of 30,000 feet.

Nashville—Brick Works.—E. T. Lewis Company will establish brick plant. No contracts have been let. W. W. Southgate is engineer in charge.*

Nashville—Flour Mill.—Liberty Mills (flour, meal and grits) contemplates remodeling its plant, and the directors will soon make a definite decision.

Nashville—Coffee-roasting Plant.—Orr, Mizell & Co. will double the capacity of their coffee-roasting plant; present output fifty bags daily.

Tracey City—Coal Mining, Coke Manufacturing and Timber Developments.—Thomas Coal & Land Co. has been organized, with W. H. Thomas of Columbus, Ohio, as president; D. H. Thomas, secretary-treasurer, and E. M. Jones of Tracey City, superintendent. They propose to secure the development of 60,000 acres of coal and timber lands they have acquired, and after constructing a railway through the properties will lease to subsidiary companies that will open coal mines and erect coke ovens. The company will not mine or manufacture, but the members will, as individuals, do so. Company has chartered, with \$100,000 capital. E. M. Jones is resident officer, and can be addressed.

TEXAS.

Austin—Printing Plant.—Gammel Statesman Publishing Co., reported incorporated lately with \$200,000, intends to erect a modern printing plant, each machine to be run by a separate motor. A three-story building 46x160 feet has been purchased, and an addition for 100-horse-power plant to furnish power and lights will be built. About \$75,000 will be expended for machinery. No contracts have been let as yet. C. F. Gydson, secretary, can be addressed by inquirers.*

Austin—Agriculture.—Incorporated: Colorado Agricultural Co., capital stock \$20,000, for growing, selling and purchasing seeds, plants, etc.; incorporators, N. S. Hunsden, James Downie and George P. Warner.

Ballinger—Irrigation System.—R. K. Wyllie will establish plant to irrigate 300 acres of land. Contract for machinery has been awarded.

Beaumont—Cafe.—Chartered: Beaumont Cafe Co., with a capital stock of \$10,000, by Albert L. Kiber, T. L. Coplin and Henry L. Holman.

Beaumont—Oil Refining.—Chartered: National Refining Co. of Beaumont, capital stock \$27,000, by Frederick A. Thomas, Alfred A. Glover, H. C. Speer, Alex. B. Bruce, C. A. Teagle, T. N. Hill and Simon Davis, for refining oil.

Beaumont—Electric-light and Power Plant. Gladys Electric Light, Water & Power Co.,

organized under the laws of South Dakota, with a capital stock of \$100,000, has been granted permit to do business in Texas. Texas office is at Beaumont.

Beaumont—Liquor Dealers.—Chartered: Chan-Tepper Company, Limited, capital stock \$500, by Sol Chan, Max Tepper and John W. Myrick.

Beaumont—Boiler Works.—Penman Steel and Iron Works will issue \$75,000 in bonds for the purpose of building boiler-works addition to its plant.

Bonham—Mercantile.—Chartered: Gale-Chaney Company, capital stock \$75,000, by R. D. Chaney, W. T. Williamson, T. F. Gray, P. G. Taylor, Curry Murphy, C. A. Wheeler and others.

Cleburne—Broom Factory.—J. H. Bauman and T. R. Allison will establish a broom factory.

Corsicana—Mining, etc.—Chartered: Nickel Creek Oil & Mining Co., capital stock \$50,000, by J. D. Carroll, W. M. Morgan, J. J. Wilson and J. H. Galbreath, for mining and oil-drilling.

Dallas—Printers' Supplies.—Incorporated: Texas Printers' Supply Co., capital stock \$25,000, by A. M. Barnhart, Maurice Barnhart, W. H. French, E. George Myers and John B. Jones.

Dallas—Printing Plant.—Chartered: Dorsey Printing Co., capital stock \$300,000, by J. E. Adoue, J. B. Wilson, Alex. Sanger, A. P. Tinson, John V. Hughes, James A. Dorsey and Henry Dorsey, to operate printing plant.

Fort Worth—Publishing.—Incorporated: Reporter Publishing Co., capital stock \$10,000, by J. B. Buchanan, F. L. Crosby and C. E. Lee.

Fort Worth—Oil Wells.—Chartered: Prairie Oil Co., capital stock \$20,000, by George T. Bishop of Cleveland, Ohio; P. M. Haines and C. A. Taylor of Fort Worth, to drill for oil.

Hackberry—Cattle Company.—Chartered: Hackberry Cattle Co., capital stock \$10,000, by James Williams, C. C. Neuhaus and W. O. Neuhaus.

Hidalgo—Irrigation System.—Chartered: Hidalgo Canal Co., capital stock \$500,000, to construct a general system of irrigation, building a canal from Rio Grande river, also to supply water for city water-works and stock-raising. William Briggs, H. W. Lanz, Lake Charles, La.; F. B. Coffell, Jennings, La.; John Casner and W. F. Sprague of Hidalgo are the incorporators.

Houston—Gas-engine Works.—Chartered: Hawkins Automobile & Gas Engine Co., capital stock \$20,000, by G. W. Hawkins, E. H. Lewis, T. H. Watkins, W. E. Ramsey and Charles Bender, Jr., to manufacture gas engines and automobiles.

Leonard—Mercantile.—Incorporated: Leeper, Evans & Rotan Co., capital stock \$10,000, by J. W. Rotan, J. E. Leeper, R. O. Evans and Joe F. Hall.

Marlin—Telephone Franchise.—City has granted telephone franchise to the Falls County Telephone Co., and a system will be established.

McKinney—Cotton Mills.—Local investors have accepted the proposition for a cotton mill, recently mentioned, made by A. E. Parker of Houston. A \$150,000 plant will be built.

Roscoe—Lumber Company.—Incorporated: Roscoe Lumber Co., capital stock \$25,000, by John C. Hamm, George S. Cordell and Albert G. Wilks.

San Angelo—Mining, etc.—Chartered: Jeanette Mining Co., capital stock \$5000, by Geo. Hugelstein, S. W. Merchant, J. L. Malone and W. P. Kelly, for mining purposes.

Strawn—Coal Mines.—Mt. Marion Coal Mining Co. has let contracts for installation of the new mining plant mentioned last week. About \$50,000 will put the property in modern condition for working. One shaft will be opened for a daily output of 800 to 1000 tons, and later on an electric plant will probably be built. Capital stock is \$150,000; W. R. Carpenter, president; C. M. Burklew, secretary, and W. W. Johnson, vice-president.*

VIRGINIA.

Berkley—Building Materials Factory.—James G. Wilson Company has purchased site for and will erect a plant for making steel doors and window shutters and for general woodworking. It is said that \$50,000 will be invested. Address care D. C. Foreman.

Berkley—Iron Works.—Old Dominion Iron Works will erect additions to its plant, extending the machine, boiler and blacksmith departments.

Covington—Clay and Limestone Developments.—E. W. Church of Clifton Forge, Va., and De Witt Steele of Covington will develop

lands containing clay and limestone, output to be several tons daily at the start. Later on the parties expect to build brick and lime plants.

Covington—Iron Mines.—Alleghany Ore & Iron Co. of Clifton Forge, Va., has bought the iron mines of the Potts Valley Mining Co. near Covington, also purchased mining plant, and will continue operations.

Fredericksburg—Excelsior Factory.—W. H. Peden has purchased at \$1750 site for and will erect an excelsior factory.

Luray—Copper Mines.—Virginia Consolidated Copper Co. is actively developing its copper properties near Luray. About 200 acres of mineral rights are controlled, and extensive developments are planned. Capital stock of company is \$1,000,000.

Newport News—Real Estate.—Chartered: C. B. Nelms & Bro. and Marye, Boynton & Chapin have consolidated, with C. B. Nelms, president; W. Scott Boynton, vice-president; W. T. Chapin, treasurer; C. C. Nelms secretary; J. L. Marye, manager; capital stock \$100,000.

Newport News—Shoe Factory.—Eagle Shoe Co., reported incorporated last week with \$100,000 capital, will remove shoe factory to Newport News from Fredericksburg. New buildings will be erected, and until they are ready for occupancy, which will be about next April, the plant will continue at Fredericksburg. V. M. Fleming of Newport News is president.

Norfolk—Dump-cart Works.—Board of Trade is corresponding with New York manufacturers who contemplate locating dump-cart works at Norfolk.

Richmond—Water-works Improvements.—The city contemplates calling an election on the issuance of \$405,000 in bonds for the purpose of improving its water-works, especially such improvements as will secure a pure supply. Address "The Mayor."

Richmond—Tobacco Factory.—It is stated John Wright will establish a plug-tobacco factory.

WEST VIRGINIA.

Ansted—Coal Mines.—William N. Page, Raleigh C. Taylor, George W. Imboden and W. H. Evans of Ansted and Thomas D. Ransom of Staunton, Va., have incorporated Loup Creek Colliery Co. for the purpose of developing coal lands. Capital stock is placed at \$2,000,000.

Beckley—Electric-light Plant.—City has granted franchise to M. A. Riffe for the construction of an electric-light plant.

Bethany—Improvement Company.—Incorporated: Bethany Improvement Association, capital stock \$25,000, by T. E. Cramlet of Bethany, G. H. Anderson and W. A. Dinker of Pittsburgh, Pa., and others.

Charleston—Coal Lands.—Gov. Albert B. White is closing negotiations for coal lands in Preston county.

Frostburg—Coal Mines.—Chartered: Hamilton Coal & Coke Co., for coal mining and manufacturing coke. The capital stock is \$150,000, and the incorporators are Alvin P. Adams, Irving Adams, Howard Adams and Frederick Dallam of Baltimore, and W. A. Somerville of Frostburg.

Huntington—Iron Foundry.—Central City Foundry Co. contemplates rebuilding its plant, burned last week at a loss of \$15,000; will not begin work until next spring if decision is reached to rebuild.

Huntington—Steam Bakery.—J. B. Stewart, architect, has prepared plans and specifications for bread and cracker factory, the building to be 70x140 feet, three stories high, and cost \$15,000.

Marshall County—Coal Mines.—J. N. Davidson, president of Second National Bank, Allegheny, Pa., and associates have purchased a tract of 22,000 acres of coal land in Washington county, Pennsylvania, and Marshall county, West Virginia, and intend to develop the property.

Oliver—Lumber Plant.—Chartered: Decker's Creek Lumber Co., with a capital stock of \$50,000, by A. C. Oliver of Morgantown, W. Va.; C. J. Duncan, W. G. Buterbaugh, D. S. Buterbaugh and M. E. McNeal of Windber, Pa.; purpose, to operate lumber plant.

Piedmont—Telephone Systems.—Piedmont & Keyser Telephone Co. has been organized, with capital stock of \$20,000, by M. A. Patrick, C. W. Gretzner and Timothy Kenny of Piedmont, F. M. Reynolds, C. J. Webb and others of Keyser and acquired the telephone systems at Piedmont and Keyser.

Shepherdstown—Grain Elevator.—W. N. Lewis contemplates rebuilding his burned grain elevator.*

Sistersville—Glass Works.—C. L. Wise & Son of Worthington, Pa., are the promoters of the glass factory mentioned last week. A

\$30,000 stock company will be organized to own and operate the plant.

Sistersville—Mercantile.—Incorporated: Clendening Company, capital \$50,000, by R. M. Clendening, John Burns, J. H. Smith and others.

Welch—Livery.—G. W. Litz, L. C. Anderson and others have incorporated G. W. Litz Stock Co., with capital of \$5000.

Wetzel County—Gas Wells.—Hope Gas Co. of Pittsburgh, Pa., is about to close the purchase of several thousand acres of land in Wetzel county, intending to develop same for gas. Colburn & Robinson of Wheeling, W. Va., are negotiating the sale.

Wheeling—Tobacco Factory.—Bloch Bros. Tobacco Co. will erect an addition to its factory. New building will be eight stories high, to contain machinery to double present output.

Wheeling—Foundry and Gas-engine Works.—Pittsburg Manufacturing & Supply Co., organized with \$50,000 capital, has acquired the Center Foundry Co.'s plant and will enlarge same, adding considerable new machinery; will also add a plant for building gas engines.

Wheeling—Potteries.—Chartered: Wheeling Potteries Co., with a capital stock of \$1,250,000, by Chas. W. Franzheim, Wm. A. Isett, J. J. Holloway, W. A. Wilson, W. J. Mays, Geo. K. Wheat, Wm. F. Stifel, Joseph Speidel, Wm. Kirbach, H. E. Franzheim, Geo. Wise and J. A. Miller, to manufacture sanitary and art pottery wares and other kinds of clay product.

Wheeling—Manufacturing, etc.—Chartered: Van Wert Manufacturing & Publishing Co., with a capital stock of \$25,000, by W. E. Van Wert, Ferdinand Wingerter, A. L. Wingerter, Alice M. Van Wert and Charles A. Wingerter.

INDIAN TERRITORY.

Chickasha—Gravel Mines.—Chickasha Gravel Co. has been chartered, with capital stock of \$50,000, to develop cement gravel deposits.

OKLAHOMA TERRITORY.

Edmond—Mercantile.—Incorporated: Big Four Mercantile Adjustment & Stock Co-operative Co., with \$12,000 capital, by A. M. and N. B. Ruhl of Edmond, L. C. Crockett of Sulphur Springs, I. T., and J. E. Segraves of Guthrie, O. T.

El Reno—Telephone System.—Chartered: Topeka & El Reno Telephone Co., with \$100,000 capital, by W. F. Evans of Topeka, Kan.; F. H. Wright and C. O. Blake of El Reno, Henry B. Johnston of Chickasha, I. T., and William M. Grimes of Guthrie, O. T.

Marshall—Mill, etc.—Incorporated: Marshall Mill & Elevator Co., with \$10,000 capital, by W. L. and R. I. Retta and S. Helton.

Oklahoma City—Pickling Plant.—Trapp & Stokely will establish a pickling plant, investing about \$50,000. Address care J. T. Pierce of Choctaw, O. T.

Oklahoma City—Stone Works.—W. B. Hughes & Co. of Fort Worth, Texas, will remove their stone-cutting plant to Oklahoma City. About \$50,000 will be invested at the new location.

Thomas—Cotton Gins.—Chartered: Thomas Ginning Co., with \$5000 capital, by Warren Scott, A. Clair, N. A. Nichols, Rush H. Todd and F. D. Curphy.

Wildman—Gold Mines.—Gold Standard Mining & Milling Co., reported incorporated in September with \$1,500,000 capital, has acquired gold properties for development, and will at once begin operations. E. O. Williams is secretary.

BURNED.

Allentown, La.—Allen Bros. & Wadley Co.'s lumber plant; loss \$30,000.

Georgetown, S. C.—Donaldson Bros.' rice mill; loss \$8000.

Lexington, Tenn.—Conkling Flouring Mills; loss \$3000.

Salisbury, N. C.—Peacock & Graf's wood-working mill; loss \$12,000.

BUILDING NOTES.

* Means machinery, proposals or supplies are wanted, particulars of which will be found under head of "Machinery, Proposals and Supplies Wanted."

Abita Springs, La.—Hotel.—Richard Pearce, Rufus E. Foster and others of New Orleans have incorporated Abita Springs Hotel & Cottage Co., Ltd., to build hotel. Capital stock is \$25,000.

Atoka, I. T.—Hotel.—Chartered: Atoka Improvement Co., for building a hotel; capital \$50,000. G. A. Cobb, M. Conlan, J. D. Lank-

ford, G. T. Rall, J. S. Fulton, P. A. Roberts, J. W. McLendon, D. H. Linebaugh and B. G. Smiser are directors.

Baltimore, Md.—Railroad Piers.—Baltimore & Ohio Railroad Co. has let contracts to A. R. Morrison of Wilmington, Del., for construction of its proposed pier on the river front. Structure will be 350 feet long, superstructure 138x296 feet. Warehouse building two stories high is a part of the plan. Nearly \$500,000 will be expended.

Baltimore, Md.—Theater.—James L. Keenan has taken out permit for building his proposed theater at Franklin and Howard streets. Plans show a structure five stories high, 70x158 feet, to cost \$350,000. Plans by John D. Allen Co. of Philadelphia, Pa. Contract for erection given to D. W. & G. H. Thomas.

Baltimore, Md.—Apartment-house.—Preston Apartment Co., reported incorporated during past week with \$140,000 capital, is building an apartment-house at Preston street and Guilford avenue, and contemplates building another at Chase street and Guilford avenue. Address care John H. Trimble.

Baltimore, Md.—Church.—St. Paul's E. R. Church, Rev. L. E. Coblenz, pastor, has accepted plans and specifications for erection of \$40,000 edifice, to be 86x100 feet, one story high, of granite.

Baltimore, Md.—Hotel.—John Waters has received contract to remodel 107-9-11 East Baltimore street into a hotel. Parker & Thomas, Merchants' National Bank Building, are the architects.

Belton, S. C.—Bank Building.—Farmers' Bank will erect modern banking building; John A. Horton, cashier.

Bennettsville, S. C.—Warehouse.—C. S. McCall, A. J. Matheson, J. P. Bruden and others will form \$4000 company to build tobacco warehouse.

Braidentown, Fla.—Jail.—An expenditure of \$11,500 to enlarge the county jail has been authorized. Address "County Commissioners."

Brookland, Md.—Seminary Building.—Thos. Hillier of Baltimore has contract for erection of proposed \$50,000 building for St. Mary's Seminary.

Chesapeake City, Md.—Bank Building.—First National Bank, John Banks, cashier, will erect banking building with fireproof vaults, etc.

Clinton, La.—School.—City will build school to cost \$7500. Address "The Mayor."

Columbia, S. C.—Bridge.—Lexington & Columbia Railway Co. will build a bridge to cost \$10,000 across the Congaree river into Columbia. Alfred J. Fox is president.

Fort Worth, Texas.—Bank Building.—M. R. Sangulnet is architect for Fort Worth National Bank's proposed building reported recently. Fort Worth Improved Real Estate Co. has organized to own the building. Structure will cost about \$100,000.

Fort Worth, Texas.—Hotel.—Delaware Hotel Co. will expend about \$20,000 to remodel and improve its hotel.

Giddings, Texas.—Depot.—Houston & Texas Central Railroad will build freight depot; J. M. Lee, superintendent, Houston.

Greenville, Texas.—Church.—Cumberland Presbyterian congregation will erect church building to cost \$10,000.

Gulfport, Miss.—Hotel.—John T. Jones of Buffalo, N. Y., president Gulf & Ship Island Railroad, will expend about \$350,000 for construction of his hotel, reported in September. Construction work has begun, and building will have 235 rooms, fifty bathrooms, electric-lighting plant, steam-heating apparatus and other modern improvements.

Guthrie, O. T.—Depot.—Central Oklahoma Union Depot & Terminal Railroad Co. has been chartered, with capital stock of \$50,000, to build depots, etc., at Guthrie, Oklahoma City and elsewhere.

Guthrie, O. T.—Home Buildings.—Chartered: Great Western Home Building Co., with \$10,000 capital, by F. M. Benefield, D. Jackson, T. W. Houston and S. D. Frazier of Coffeyville, Kan.; L. D. Winters of Independence, Kan.; C. F. Cotterall, Isaac Smithson and H. M. Adams of Guthrie.

Hopkinsville, Ky.—Telephone Building.—Cumberland Telephone & Telegraph Co. has let contract for construction of its proposed \$15,000 building to Forbes & Bro.

Hot Springs, Ark.—Courthouse.—Garland county will advertise for bids about January 1 for erection of the courthouse mentioned last week. Amount available will be \$75,000. Address "County Commissioners."

Lake Village, Ark.—Jail.—County is about to let contract for erection of jail. Address "County Clerk."

Lexington, N. C.—Church.—W. Lee Harbin

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has received contract for erection of \$10,000 church after plans by Wheeler & Runge of Charlotte, N. C.
Louisville, Ky.—Residence.—Edwin H. Ferguson has taken out permit for erection of residence to cost \$75,000; to be of stone and pressed brick, 58x91 feet, tile roof, etc.
Louisville, Ky.—Warehouse.—American Tobacco Co. let contract to Joseph Sibley & Co. for erection of the \$50,000 warehouse reported last week. John B. Hutchings is the architect.
Memphis, Tenn.—Home Building.—Memphis Elks will erect a home building. A structure three stories high, 66x74 feet, etc., is proposed. Chighizola & Harker have prepared preliminary plans. A. M. McCreight is chairman of committee.
Mobile, Ala.—Bank Building.—Central Trust Co. has let contract for remodeling and improvements for banking purposes at 62 St. Francis street.
Norfolk, Va.—School.—City has accepted plans and specifications by John K. Peebles for construction of its proposed \$25,000 school-house.
Oklahoma City, O. T.—Business Building.—It is reported J. J. Culbertson of Paris, Texas, will erect five-story building, fifty feet front, in Oklahoma City.
Oxford, Miss.—Dormitory.—University of Mississippi will open bids November 27 for erection of dormitory and additions in accordance with plans and specifications of T. C. Link, architect. Plans on file at Mechanics' Exchange, New Orleans, La.; at architect's office, St. Louis, Mo., and of same at Jackson, Miss.; also at office of R. B. Fulton, chancellor of university, Oxford.
Sherman, Texas.—Depot.—St. Louis Southwestern Railroad, E. T. Brittin, president, contemplates building a depot.
Stephensport, Ky.—Bank Offices.—Two States Bank, I. C. Adair, Fordville, Ky., president, will remodel building for its offices.
St. Louis, Mo.—Office Building.—Bankers' Trust Co. (now forming) has purchased the Holland Building, and will remodel the ground floor for banking offices.
St. Louis, Mo.—Office Building.—Frisco Building Co. has been incorporated, with capital stock of \$600,000, and let contract to James Black Masonry & Construction Co. for erection of office building 120x160 feet, twelve stories high, for general office purposes. (This is to be occupied as general headquarters by St. Louis & San Francisco Railroad.)
Tampa, Fla.—Business Building.—Crenshaw Bros., commission merchants, will erect building, two stories, of brick, etc. Contract awarded to E. H. Foy.
Tryon, N. C.—Hotel.—Incorporated: Tryon Hotel Co., with a capital of \$5000, to build hotel.
Wheeling, W. Va.—Office Building.—Henry Schmulbach will erect an office building.
Winston, N. C.—Auditorium.—Hoyle Bros. have contract to erect proposed auditorium at about \$30,000.

RAILROAD CONSTRUCTION.
Railways.
Alexandria, La.—A. L. Phillips, chief engineer of the new railroad to be built to New Orleans, is reported as saying that it is not connected with the "Frisco" system.
Ardmore, I. T.—Engineers for the Missouri, Kansas & Texas Railway have, it is reported, located a line from Coalgate to within two miles of Ada. S. B. Fisher is chief engineer, St. Louis, Mo.
Augusta, Ga.—It is reported that the Augusta & Aiken Electric Railway will be extended to Columbia. J. U. Jackson of Augusta is president.
Baltimore, Md.—The officials of the Western Maryland Railroad are making an inspection of the line, preparatory, it is reported, to building the proposed extensions. F. S. Landstreet is vice-president and general manager, and Charles O. Vandevanter, chief engineer, Hillen Station, Baltimore.
Baltimore, Md.—It is reported that the Baltimore & Ohio Railroad will survey for a branch from Wheeling, W. Va., to Waynesburg, Pa. J. M. Graham is chief engineer, Baltimore, Md.
Baltimore, Md.—It is reported that the Baltimore & Ohio Railroad will build an extension of the Confluence & Oakland road from Krug to Oakland, Md. J. M. Graham is chief engineer, Baltimore, Md.
Batesville, Ark.—J. H. Reynolds has, it is reported, secured a contract for forty-eight miles additional of the White River extension of the Missouri Pacific & Iron Mountain

from Buffalo City to Keener or Oregon Flats.
Birmingham, Ala.—It is reported that the Louisville & Nashville will build an extension of the Birmingham Mineral Railroad from Altoona to Gadsden. R. Montfort is chief engineer, Louisville, Ky.
Black Rock, Ark.—It is reported that the Chicago, Rock Island & Pacific Railway will build an extension from Jacksonport to Black Rock. W. E. Dauchy is chief engineer, Chicago, Ill.
Black Rock, Ark.—Dr. J. H. Myers, who is interested in the proposed Arkansas Northern Railroad, writes to the Manufacturers' Record saying that the line is to begin near the Southern Missouri line, about two degrees west of the fifth meridian, thence south through Randolph, Lawrence, Independence and Jackson counties. It will go through Pocahontas, Black Rock, Powhatan, Calumine, Cord, Newark, Jacksonport and other places. It will be an almost level line, with but little rock; length about 100 miles.
Calera, Ala.—It is reported that the Louisville & Nashville Railroad will build a double track through Calera. R. Montfort is chief engineer, Louisville, Ky.
Chattanooga, Tenn.—S. W. Divine, one of the directors in the Cleveland & Ducktown Electric Railway, is quoted as saying that he has submitted plans for electric lines from Chattanooga to Ducktown via Cleveland, and from Chattanooga to Nashville, the electricity to be generated by water-power.
Cincinnati, Ohio.—Mr. C. A. Wilson, chief engineer of the Cincinnati, Hamilton & Dayton Railway, writes the Manufacturers' Record concerning the report that the company is preparing to build into Eastern Kentucky. He says it is not correct, and that the company "is confining its attentions for the present entirely to the north side of the Ohio river."
Cleburne, Texas.—It is reported that the Dallas, Cleburne & Southwestern Railroad has made a preliminary survey from Egan to Dallas. Track is completed between Egan and Cleburne, ten miles. The distance from Cleburne to Dallas via Egan is forty-eight miles. H. A. Genung is chief engineer, Cleburne, Texas.
Columbia, S. C.—It is reported that work will soon begin on the proposed electric railway from Columbia to Lexington, in which Col. G. T. Graham of Lexington is interested.
Covington, Va.—Surveys have been made for the Ronceverte & Lewisburg Railroad, six miles long; president, Dabney C. T. Davis, Jr., of Lewisburg; manager, Harry Frazier.
Dallas, Texas.—President B. F. Yoakum of the St. Louis & San Francisco Railroad is reported as saying that it will build to Dallas from a point near Carrollton, on the Red River division, next year. J. F. Hunkley is chief engineer of construction of the "Frisco" system, 800 Fullerton Building, St. Louis, Mo.
Dallas, Texas.—J. M. Carter, vice-president and general manager of the Belton & Temple Electric Railway, writes from Dallas to the Manufacturers' Record saying that a representative of the company will visit Chicago, Cleveland, Cincinnati, Pittsburg, Baltimore, Philadelphia and New York to purchase material for the construction of twelve miles of railway between Belton and Temple. Sixty-pound steel rails, standard ties and poles will be used. Orders will be placed for rolling stock, or the entire construction and equipment will be let to contractor.
Dublin, Ga.—It is reported that a railroad will be built from Dublin to Eastman by the Mcon, Dublin & Savannah Railroad and the Georgia Shingle Co. W. A. Shank is manager of the latter.
Fort Smith, Ark.—Progress is reported on the extension of the Fort Smith & Western Railroad as follows: Track laid as far as the South Canadian river, Indian Territory. There are sixty teams and 200 men at work near Weleetka, I. T.; work is being rushed on the 1500-foot bridge across the South Canadian, but bridge work between that river and Guthrie, Okla., has been stopped for sixty days to wait for the graders to catch up. There are five months' more work to be done, but it is difficult to secure graders and teams.
Fort Worth, Texas.—It is reported that the rails for the extension of the Weatherford, Mineral Wells & Northwestern Railway, now a Gould line, are being delivered at Mineral Wells. B. S. Wathen is chief engineer of the Texas & Pacific Railway, Dallas, Texas.
Fort Worth, Texas.—F. M. Haines, second vice-president and general manager of the Northern Texas Traction Co., writes to the Manufacturers' Record saying that nothing has been definitely decided about building extensions from Fort Worth to Weatherford and other points.

Gadsden, Ala.—The Chattanooga Southern Railroad is reported to be making a survey to build a four-mile line to the steel plant. W. W. Kent is general manager, Chattanooga, Tenn.
Gulfport, Miss.—It is reported that a preliminary survey for the Natchez & Gulf Railroad will begin immediately. W. W. Hungerford is general manager and chief engineer, Gulfport, Miss.
Guthrie, Okla.—The Oklahoma Traction Co. has been incorporated to build either an electric or steam railroad seventy-five miles long, connecting Guthrie, Oklahoma City and Fort Reno. The directors are John W. Sharlet, Selwyn Douglass and L. M. Splitter of Oklahoma City, and George S. Green and U. C. Guss of Guthrie.
Guthrie, Okla.—The Central Oklahoma Union Depot & Terminal Railroad Co. has been incorporated to build union terminals at Guthrie and Oklahoma City, to construct belt lines, and also to build 150 miles of railroad in the central part of Oklahoma. The incorporators are J. J. Collister, W. S. McCaul, J. G. Trimble, George F. Riehl, L. Underwood and W. H. McHattie of Kansas City, Mo., and others. The plan is said to include the building of a railroad from Jefferson City, Mo., to El Reno, Okla., a total of 600 miles of line being proposed. It is reported that rights of way have been secured for 250 miles.
Guthrie, O. T.—The Hobart Railroad & Townsite Co. has been incorporated, with \$500,000 capital, by A. J. Dunlap, W. C. Brady, W. R. Livermore and J. A. Hyndman of Hobart.
Harrisonburg, Va.—The Chesapeake Western Railway has amended its charter to increase its capital stock preparatory, it is said, to building further extensions. W. H. Hall is general manager, 141 Broadway, New York.
Houston, Texas.—It is reported that the Southern Pacific Railway will build an extension from Victoria to Placedo. E. B. Cushing is engineer maintenance of way, Houston, Texas.
Huntsville, Ala.—Concerning the plan to build a railroad from Huntsville to Oneonta, President M. H. Smith of the Louisville & Nashville Railroad is reported to have informed the committee, composed of R. E. Pettus and others of Huntsville, that he will take the matter up with the board of directors.
Kinston, N. C.—Mr. J. W. Lynch, president of the Carolina & Kinston Railroad Co., writes to the Manufacturers' Record that twenty-one miles of the line have been constructed and are in operation. He says that the road will run directly east from Kinston and will connect at some point with the Atlantic Coast Line.
Lake Charles, La.—The Martin Pine Co. has begun construction on its tram road six miles long, on which two and three-quarters miles have been graded. Rails have been received for four miles.
Leonard, Texas.—Mr. J. A. Thomas writes to the Manufacturers' Record that citizens of Leonard have a railroad projected from Bonham via Leonard and Blue Ridge to McKinney. It is being promoted by F. H. Farnham of Cleveland, Ohio, representing the Union Traction Co.
Little Rock, Ark.—The England & Clear Lake Railroad Co. has been incorporated to build a line from the northwest corner of section 15, township 2 south, range 9 west, in Lonoke county, to a point known as Laster's Landing, on the Arkansas river, in the counties of Lonoke and Pulaski, a distance of about nine miles. The directors are J. E. Hicks, N. B. Beakley, John H. Laster, W. J. Locke and E. N. Bixby. Other stockholders are G. W. Morris and J. Swain.
Little Rock, Ark.—The Arkansas Southern Railway will, it is reported, soon be extended from Eldorado to Little Rock. C. C. Henderson is general manager at Ruston, La.
Little Rock, Ark.—The Piggott & Northwestern Railroad Co. has been chartered to build a branch twelve miles long from Piggott, on the St. Louis Southwestern, to a point in Clay county on the east bank of the Cache river. The directors are F. G. Taylor, J. M. Meyers, R. S. Goeppinger, H. W. Moore, D. D. Thompson, W. E. Spence, S. E. Moore and M. A. Spence.
Little Rock, Ark.—The Arkansas, Red River & Paris Railroad Co. has been chartered to build a line from the station of Morris' Ferry, on the Kansas City Southern, where it crosses Little river, and thence run westerly eight miles to the line between Arkansas and Indian Territory; thence westerly eight miles to Allen's Siding, on the Arkansas & Choctaw Railroad; thence southwesterly direction to Harris' Ferry, on Red river, twenty-two miles, making a total of

thirty-eight miles. The directors are A. D. Moon and W. S. Pryor of Kansas City, Wm. A. Carroll of Mena, Polk county, and Robert S. Allen and Thomas J. Miller of Morris' Ferry, Little River county. The committee to open subscriptions consists of Wm. A. Carroll, Robert S. Allen, Rush Carroll, Thos. J. Miller and Andrew M. Jackson. A. D. Moon and W. S. Pryor own the majority of the stock, or \$105,100 each; total capital \$266,000.
Louisville, Ky.—A. S. Berry of Newport, M. I. Barker, W. S. Howe and E. F. Layman are interested in the proposed electric railroad to be built between Louisville and Covington. Mr. Layman will make the survey.
Lynchburg, Va.—J. J. Bean, J. W. Motlow, W. W. Gordon and Judge Lynch of Lynchburg are reported to have called upon J. W. Thomas, president of the Nashville, Chattanooga & St. Louis Railway, and requested that a branch be built from Tullahoma to Lynchburg. President Thomas took the matter under consideration.
Mayking, Ky.—The Wise Terminal Railroad will, it is reported, be extended in Dickinson county, and also through Pound Gap.
Memphis, Tenn.—Engineers under Robert Kleinberg of Memphis are pushing the survey for improving the Luxora branch of the St. Louis & San Francisco in Arkansas.
Memphis, Tenn.—The Southern Railway is continuing betterments to its line from Memphis to Stephenson, Ala., 272 miles. The work of rebuilding another section of thirty-five miles has just begun. Seventy-five pound steel rails are being laid in place of lighter metal. W. H. Wells is engineer of construction, Washington, D. C.
Memphis, Tenn.—It is reported that the Southern Railway will build new terminals at Memphis, near Montgomery Park. W. H. Wells is engineer of construction, Washington, D. C.
Mexico, Mex.—It is reported that Charles F. Lummis of Philadelphia has the contract for building the Morella & Acambaro Railroad, in which A. J. Peyton of New York, Charles M. Heath and George Buckman of Trenton, N. J., are interested. Under the concession 225 miles of roadbed must be completed within two years from Inapato to Arlo.
Mexico, Mex.—It is reported that the National Railroad of Mexico will build an extension 100 miles long to San Luis Potosi. R. T. Macdonald is chief engineer, Mexico, Mex.
Montgomery, Ala.—The Geneva Railroad Co., to build a line eleven miles long from Geneva to Chancellor's, connecting with the Chattanooga & Gulf division of the Central of Georgia, has been incorporated by W. W. Barnett, J. J. Morris, H. P. Treadwell, W. H. Lanier, W. L. Warren, J. M. Jeter, W. O. Mulkey, Ed. M. Johnson, J. H. Ard, James Lurie and J. R. Clarke, all of Geneva.
New Orleans, La.—The New Orleans & Northwestern Railroad Co. has been reorganized as a Gould line, with headquarters in New Orleans. Russell Harding of St. Louis, general manager of the Missouri Pacific Railway, is vice-president of the line, which is to be extended to New Orleans.
Orange, Texas.—The directors of the Orange & Northwestern Railroad have, it is announced, decided to extend the road from Buna to Shreveport, La., about 135 miles, and have instructed H. L. Montandon, chief engineer, to make preliminary surveys.
Paris, Ky.—Construction is in progress on the electric railway between Paris and Lexington. Polan & Sons have the grading contract. Grading on the Bourbon county end is nearly completed.
Pensacola, Fla.—The Central of Georgia Railway has, it is reported, purchased the Pensacola, Alabama & Tennessee Railway to secure wharf facilities. H. McLaughlin is president, Pensacola, Fla.
Pilgrim, Ky.—The Wolf Creek Railway Co. has been organized to build a line along Wolf creek about twenty miles. West Virginia capitalists are interested. The line is to connect with the Norfolk & Western one mile north of Warfield.
Pine Bluff, Ark.—Work is progressing on the extension of the Pine Bluff & Western from Sheridan to Benton.
Port Lavaca, Texas.—It is reported that one of the trunk lines is behind a plan to build a new coast-line railroad connecting the county-seats of Refugio, Calhoun, Matagorda and Brazoria counties.
Radford, Va.—J. G. Osborne of Radford is reported to have charge of constructing the Marion & Rye Valley Railroad in Smyth county.
Salisbury, N. C.—A branch railroad six and three-quarters miles long from New London to the Narrows has been completed for the Whitney Reduction Co. of Salisbury, of

which Capt. E. B. C. Hambley is president. It is reported also that the company has ordered rails to extend the branch several miles down the banks of the river.

San Angelo, Texas.—The arrival of grading machinery at San Angelo for the construction northward of the Kansas City, Mexico & Orient Railway is reported.

Savannah, Ga.—The stockholders of the Chattahoochee & Gulf Railway have approved the plan for an extension twenty-four miles long from Sellersville, Ala., to Florida, Ala.

Sistersville, W. Va.—Engineers have begun a survey for the electric line between Sistersville and New Martinsville. It is reported that construction will begin on the line from Sistersville to Middlebourne by March 1 next.

Silgo, Mo.—Doddridge & Collins are reported to have located eighteen miles of the Silgo & Eastern Railway, under construction, to develop lumber lands for the Silgo Iron Company.

St. Louis, Mo.—The general managers' committee of the Terminal Railroad Association has decided to call for bids for its terminal extensions. W. S. McChesney, Jr., is general manager.

St. Louis, Mo.—The extension of the St. Louis, Kansas City & Colorado Railroad (Rock Island system) is reported to have been located from Windsor via Leeton. It will leave Warrensburg, twelve miles, and Holden, two miles to the north, but will go via Pleasant Hill thence to Kansas City.

St. Louis, Mo.—The Manufacturers' Record is officially informed that the plans for building a connection between the Ends Bridge and the Merchants' Bridge tracks are not sufficiently matured to permit of any statement about the proposed construction.

St. Louis, Mo.—The Manufacturers' Record is officially informed concerning the reports that the St. Louis San Francisco Railroad will extend the Louisiana & Arkansas via Alexandria to New Orleans, that nothing definite has been decided in the premises.

Tampa, Fla.—It is reported that engineers for the Seaboard Air Line are making a survey for an extension to Boca Grande.

Tishomingo, I. T.—L. Kirby Pordom, cashier of the Bank of the Chickasaw Nation, is quoted as saying concerning the plan to build a trolley line from Tishomingo to Denison, Texas: "We have interested Eastern capital, and propose to build a road forty-five miles long to carry freight as well as passengers."

Vinita, I. T.—Engineers are making a survey for a railroad from Joplin, Mo., via Fairland to Needmore, and down the valley of the Grand river towards Fort Gibson.

Wellsburg, W. Va.—The Panhandle Traction Co. has applied for a franchise for a line from Wellsburg to the new town of Foliandsee. Howard Hazlett and others of Wheeling are interested.

Wellsburg, W. Va.—The Wellsburg, Steubenville & New Cumberland Railroad is seeking a franchise for an electric line from Wellsburg to a point opposite Steubenville, and thence to Holliday's Cove. S. George of Wellsburg and Cyrus Ferguson of McDonald, Pa., are interested.

Wellsville, Mo.—Preliminary surveys are under way for a change of line of the Chicago & Alton Railway from Littleby to Old Monroe, the object of which is for the purpose of reducing the distance between St. Louis and Kansas City by about sixty miles. H. F. Baldwin is chief engineer, Chicago, Ill.

Street Railways.

Baltimore, Md.—Progress is reported on the extension of the United Railways to Sparrow's Point, and it is stated that the line will be completed in December.

Beckley, W. Va.—M. A. Riffe of Roanoke, Va., is reported to have secured a franchise for building an electric railway in Beckley.

Biloxi, Miss.—James W. Bell and John Carraway, president and vice-president of the Equitable National Bank of New York, have made arrangements with local capitalists for building an electric street railway. Others interested are E. C. Joulain, J. H. Miller, W. K. M. Duke and W. A. White. This is a separate enterprise from the line proposed between Pass Christian and Ocean Springs.

Dallas, Texas.—A survey has been made for an extension of the Northern Texas Traction Co. line in Dallas. F. M. Haines is superintendent.

El Paso, Texas.—It is reported that J. P. Ramsey, general manager of the Rio Grande, Sierra Madre & Pacific Railroad, is interested with others in a plan to build a new street-car line in El Paso.

Guthrie, Okla.—The Guthrie Light & Traction Co. has been incorporated to build a street railway by John W. Shartel of Oklahoma City and F. H. Greer, C. M. Barnes, W. H. Merten and H. H. Hagan, all of Guthrie.

Louisville, Ky.—The Louisville Railway Co. has decided to build an electric line from Louisville to Jeffersonton, thirteen miles. T. J. Minary is president.

Montgomery, Ala.—The Montgomery Street Railway Co. has asked permission of the city council to build an extension and additional tracks.

Nashville, Tenn.—The Nashville Railway has applied to the city council for franchise to make extensions and other improvements to cost over \$2,000,000.

Savannah, Ga.—The Savannah Electric Co. is laying heavier rails upon part of its lines.

Machinery, Proposals and Supplies Wanted.

Manufacturers and others in need of machinery of any kind are requested to consult our advertising columns, and if they cannot find just what they wish, if they will send us particulars as to the kind of machinery needed we will make their wants known free of cost, and in this way secure the attention of machinery manufacturers throughout the country. The MANUFACTURERS' RECORD has received during the week the following particulars as to machinery that is wanted.

Abattoir.—See "Packing Plants."

Air Compressor.—Independent Ice Co., Wilmington, N. C., wants air compressor to force water from well.

Blower.—See "Foundry Equipment."

Boiler and Engine.—Reliance Manufacturing Co., Winchester, Ky., is in the market for boiler, heater and engine.

Boiler and Engine.—Virginia Excelsior Co., Fredericksburg, Va., is in the market for Corliss engine to develop 200 horse-power with ninety pounds steam pressure, and one quarter cut-off; also 125-horse-power return tubular boiler. Give specifications, price on delivery, etc.

Boilers and Engines.—See "Tanning-extract Works."

Bottling Supplies.—L. R. Gaidry, Box 286, New Iberia, La., wants addresses of bottle, labile and cork manufacturers.

Brick Works.—E. T. Lewis Company, Nashville, Tenn., is in the market for brick-works plant.

Bridge.—Bridge Commissioner R. E. Johnson, Butler, Mo., will open bids December 2 for construction of steel bridge sixty feet long. Plans and specifications now on file in county clerk's office.

Bridges.—Bids will be opened November 25 for construction of three steel beam and concrete bridges. Plans must accompany bids. For information address D. P. Le Fevre, city engineer, Cumberland, Md.

Building Materials.—See "Lumber."

Butchers' Equipment.—See "Sausage Machinery."

Cans.—Tobacco Warehouse & Trading Co., Eleventh street and Magnolia avenue, Louisville, Ky., wants addresses of makers of tin cans, especially of what is known as the "Harnes Oil Can."

Compressed-air Machinery.—See "Foundry Equipment."

Corn Mill.—See "Flour Mill."

Cotton Machinery.—Hawkinsville Cotton Mills, Hawkinsville, Ga., will need sixty 40-inch looms.

Electrical Machinery.—See "Printing Plant."

Electrical Machinery.—Crescent Bed Co., Ltd., St. Peters and Tchoupitoulas streets, New Orleans, La., wants 15 or 20-horse-power A. C. electric motor (Wagner or General Electric make), second-hand. See "Machine Tools."

Electrical Supplies.—Hawkinsville Cotton Mills, Hawkinsville, Ga., will need electrical supplies.

Elevator.—See "Grain Elevator."

Elevator.—Couch Bros. & J. J. Eagan Co., Atlanta, Ga., wants hand or motive power elevator; second-hand preferred.

Engine.—See "Hoisting Engine."

Engine.—C. P. Shaner, 1112 City Market, Lynchburg, Va., wants at once three or four horse-power gasoline engine. See "Sausage Machinery."

Extract-works Machinery.—See "Tanning-extract Works."

Fertilizer Machinery.—Alachua Fertilizer Co., Alachua, Fla., will need equipment for fertilizer factory.

Flour Mill.—Ridgeway Ginnery Co., Ridge-way, S. C., wants estimates and specifications on complete roller wheat and corn mill.

Flour Mill.—J. B. Wilhoite & Son, Wilhoite, Tenn., want to contract this winter for 75-barrel flour mill, to be erected and equipped next spring.

Foundry Equipment.—Russell Engine Co., Massillon, Ohio, wants price-lists and description of light post hammer for operation by steam or compressed air.

Foundry Equipment.—Cumberland Foundry & Manufacturing Co., Harrison street, near Cumberland street, Nashville, Tenn., wants to buy blower (second-hand Root if possible), suitable for cupola of eight to twelve tons capacity.

Foundry Equipment.—Ground Hog Plow & Foundry Co., Clarksville, Tenn., will need grinding and polishing machines for chilled plows.

Furniture.—Copiah county supervisors, Hazlehurst, Miss., will open bids December 2 for furnishing metal furniture for courthouse according to plans, etc., on file. For further information address J. B. Mayes, clerk to supervisors.

Grain Elevator.—W. N. Lewis, Shepherds-town, W. Va., will probably need full equipment for grain elevator.

Grinding and Polishing Machines.—See "Foundry Equipment."

Harness Machinery.—See "Leather-collar Works."

Hoisting Engine.—Houston & Liggett, Lewisburg, Tenn., are in the market for 8 or 10-horse-power hoist engine, in good repair, at low price.

Ice Plant.—Alachua Warehouse Co., Alachua, Fla., will probably buy ice and cold-storage equipment next year.

Ice Plant.—Chas. D. Hill, Navasota, Texas, will need cold-storage plant for packing plant. See "Packing Plants."

Leather-collar Works.—Couch Bros. & J. J. Eagan Co., Atlanta, Ga., wants machinery for leather-collar works; second-hand preferred.

Logging Equipment.—E. P. Brock, 200 Franklin street, Boston, Mass., wants addresses of makers or sellers of barking machines for logs.

Lumber.—Kelth, Simmons & Co., 309 College street, Nashville, Tenn., will soon be in the market for twenty to thirty cars of five-inch heart cypress shingles for delivery at Chickamauga, Tenn.; also for a large quantity of one-and-one-half-inch pine laths; will also want flooring.

Lumber.—Carolinian Pine & Hardwood Co., Clio, S. C., wants to contract for 1000 feet of oak lumber, 1,000,000 feet of pine lumber and 500,000 feet of red-gum lumber.

Lumber Mills.—See "Logging Equipment."

Machine-shop Tools.—See "Foundry Equipment."

Machine Tools.—Crescent Bed Co., Ltd., St. Peters and Tchoupitoulas streets, New Orleans, La., wants 12-inch stroke shaper, 12-inch lathe, six to seven-foot bed; 12-inch hand speed lathe, six to seven-foot bed; 15 or 20-horse-power A. C. electric motor (Wagner or General Electric make).

Machine Tools.—Independent Ice Co., Wilmington, N. C., wants small lathe and drill press, second-hand.

Mining Equipment.—Mt. Marion Coal Mining Co., Strawn, Texas, will be in the market for mine cars, rails and general mine supplies.

Mining Equipment.—Crafford Coal & Iron Co., J. N. Baker, general manager, Crossville, Tenn., will need air compressor, boilers, shaking screens, triples, scales, 30-pound steel rails, air motor, pipe lines, air plant, etc.

Music Boxes.—P. Sinclair, Sumter, S. C., wants to buy music boxes (about ten alms to box).

Packing Plants.—Chas. D. Hill, Navasota, Texas, wants to communicate with firms installing packing plants complete for handling hogs, etc.; cold-storage plant to be included.

Printing Plant.—Gammel-Statesman Publishing Co., C. F. Gydeson, secretary, Austin, Texas, will buy \$75,000 worth of printing machinery, etc.; also 100-horse-power plant for power and lights. Power to include 100-horse-power boiler, 80-horse-power engine, 50-horse-power motor and 25-horse-power motor.

Printing Presses.—A. H. C. Mears, Wachapreague, Va., wants addresses of makers of printing presses, including the hand presses for job printing.

Railway Equipment.—Belton & Temple Electric Railway Co. is about to buy materials and equipment for 12-mile railway, 60-pound steel rails, standard ties and poles to be used. Orders will be placed for rolling stock or entire construction and equipment will be let to contractor. A representative of company is visiting East and West to place the contracts. Address J. M. Carter, general manager, Dallas, Texas.

Railway Supplies.—See "Mining Equipment."

Rolling Mills.—Hanna & Kalmbach, New Orleans, La., want addresses of rolling mills that roll five-sixteenths and three-eighths round iron, also 1x1x½ and 1½x1x½ angles for iron-bed makers.

Roofing.—See "Tanning-extract Works."

Sausage Machinery.—C. P. Shaner, 1112 City Market, Lynchburg, Va., wants at once three or four horse-power gasoline engine, No. 52 Enterprise cutter, 85-gallon cauldron, 85-gallon kettle for hogs, and a meat mixer.

Sugar Machinery.—W. J. Smith and associates, Waycross, Ga., will need machinery for working up sugar crop.

Tanning-extract Works.—Cherokee Tanning Extract Co., H. S. Stout, superintendent, Andrews, N. C., wants to buy boilers, engines, dynamos, brass and wrought-iron pipe and fittings, riveted spiral pipe, tanks, vacuum pans, pumps (both steam and power) and galvanized-steel roofing.

Trestles.—W. E. Craighill, superintendent engineers, U. S. A., Wheeling, W. Va., will open bids December 12 for furnishing navigation pass trestles for dam No. 5, Kanawha river. Information on application to Captain Craighill or to United States engineer's office at Charleston, W. Va.

Well-drilling Equipment.—C. S. Walsh, 30 Colonial Arcade, Cleveland, Ohio, wants estimate on putting down wells in the Texas field, etc.

Woodworking Machinery.—Reliance Manufacturing Co., Winchester, Ky., is in the market for full equipment for woodworking plant.

Woodworking Machinery.—Variety Works Co., Dawson, Ga., is in the market for self-feed rip saw with a space of eight inches between collar and nut and a number of collars to fill the space, thus making possible the use of several saws on arbor.

Woodworking Machinery.—W. G. Stokes, Stokes, N. C., wants to buy machine for making saved shingles from cypress.

Woodworking Machinery.—Ground Hog Plow & Foundry Co., Clarksville, Tenn., will need woodworking machines for plow handles.

TRADE NOTES.

Elected to Congress.—Mr. Norton P. Otis, the chairman of the board of directors of the Otis Elevator Co., New York, has been elected to Congress on the republican ticket from the nineteenth congressional district of New York.

Large Filter Plant.—The city of Elgin, Ohio, has contracted with the New York Continental Jewell Filtration Co., 5th floor, Mills Building, New York, for a filter plant with 2,000,000 gallons daily capacity. Lake Erie is the source of supply.

Foundry for Sale.—Ill-health of the managing partner makes it advisable to sell a well-equipped foundry and machine works, located in a healthy Alabama town of 15,000 inhabitants. "Alabama," care of Manufacturers' Record, should be addressed with reference to this.

Coal Land Offered.—The W. P. Robertson Developing Co., South Carrollton, Ky., offers for sale 5000 acres of admirably-located coal lands in Kentucky. This lies on both sides of the Louisville & Nashville Railroad and extends five miles along the navigable Green river, making it practical to ship by both river and rail. Timber and stone for building are abundant.

Cotton Mill for Sale.—On November 29 the valuable cotton mill belonging to the Ettrick Manufacturing Co., Petersburg, Va., will be sold. This property includes land, mill buildings, complete machinery equipment, numerous operatives' dwellings and water-power. Alexander Hamilton, treasurer and commissioner, Petersburg, Va., will give further information.

Removal of Carolina Office.—The North Carolina office of the Standard Pole & Tie Co., 44 Broad street, New York, will be moved from Maxton to Wilmington. Mr. J. W. Davis, manager of this office, has personal charge of the shipment of octagonal and juniper poles from that section, and also has charge of the inspectors who inspect the cars

before shipment. All orders should be sent to the New York office, as in the past.

Land Deals.—W. P. Hornaday & Co., Union Trust Building, Cincinnati, Ohio, dealers in railroad, municipal, electric-light and water-works bonds, coal, iron and timber properties, are reported as having a number of profitable investments to offer at this time in the coal and timber lands of Kentucky, Tennessee and Virginia. Certain large deals in Southern Kentucky are expected to go through in a short time. This firm is doing an extensive business.

Virginia Springs for Sale.—Lithia Springs property, near Lithia Depot, on the Norfolk & Western Railroad, in Fincastle county, Virginia, is to be sold at auction on the 8th of December. There are about ten acres of land in this property. The water is said to be valuable medicinally. The terms are one-third cash and the rest in two annual payments. For further information E. V. Barley, Fincastle, Va., should be addressed.

A Good Lubricant.—Messrs. Adam Cook's Sons, 313 West street, New York city, N. Y., makers of Albany grease, recently received a letter from Wm. Harman, engineer steamer City of Toronto, Pentang, Ontario, who, after testing this lubricant, writes: "I found your Albany grease just as good as recommended." A sample of Albany grease and an Albany grease cup will be sent free of expense by the manufacturers to engineers for testing.

Bought Ball Engines.—A direct-connected exciter unit has been installed by the Cedar Rapids Electric Light & Power Co., Cedar Rapids, Iowa. For this firm and for the Melb Printing Press Manufacturing Co., Chicago, Ill.; the Stromburg Electric Light, Heat & Power Co., Stromburg, Neb., and the Williams Coal Co., McHenry, Ky., which recently started an electrical unit of 200 horsepower, engines were furnished by the Ball Engine Co., Erie, Pa.

Bridge Contract.—Until December 11 bids, if accompanied with certified check for \$500, will be received on the contract for building and repairing a bridge over the North Fork of the Potomac at Remington, Va. This work will be the construction of three 68-foot steel spans, one stone abutment, two stone piers, fills on both sides of the river, raising the present spans three feet, and all necessary repairs. For detailed information John K. Taliaferro, commissioner, Remington, Va., should be addressed.

Awarded Silver Medal.—At the recent Dusseldorf exhibition, Atlanta, Ga., Arthur Koppel was awarded the silver medal for his exhibit of industrial railway equipment, dump cars, inclined planes, self-discharging ore cars, electric railroads, etc. It will be remembered that this party also received the gold and silver medal at the Paris Exposition for the excellence of the exhibit. Arthur Koppel, offices 66-68 Broad street, New York city, N. Y., carries a large stock of all standard goods ready for immediate shipment.

Personal Notice.—Mr. S. S. Caskey, for a number of years superintendent of mechanical construction with the Harlan & Hollingsworth Company, has accepted a position with the F. F. Slocumb Company of Wilmington, Del. Mr. Caskey is an expert in pneumatic engineering, and is the inventor of a number of well-known appliances in this line, among the number being the Caskey portable pneumatic punch and the Caskey pneumatic riveter, both of which are manufactured, with all latest improvements, by the Slocumb Company.

To Improve Facilities.—Notwithstanding the fact that the Otto Gas Engine Works of Philadelphia, Pa., added 12,000 square feet to its floor space less than two years ago, increasing business is again crowding facilities, and the last available bit of ground in the block covered by these works is having a building 45x100 feet erected upon it. The demand for large units makes necessary these increased facilities, and the new building will be equipped with the largest and latest types of machine tools. The tools are ordered, and the new shop should be running inside of six weeks.

Sale of Compressors.—The Sullivan Machinery Co., Chicago, Ill., recently sold to G. H. Cole & Co., the well-known Cleveland contracting firm, an air compressor and a number of rock drills. The compressor is of the straight-line, single-steam, two-stage air type, and will operate twelve drills. This plant will be used to drive the Black Oak Ridge tunnel for the Knoxville, La Follette & Jellico Railroad at Dossett Station, twenty-five miles from Knoxville, Tenn. The tunnel will be 3600 feet through limestone. G. H. Cole & Co. are also using Sullivan compressors and drills on the Philadelphia water-supply tunnel at Tacony, Pa.

Large Stock.—Messrs. Charles H. Besly & Co., 10-12 North Canal street, Chicago, Ill., report their general business very good. They have a large and varied assortment of seamless brass and copper tubing, 300 sizes being carried in stock, varying from one-sixty-fourth inch outside diameter to eight and one-half inches outside diameter. Brass rod, sheet, wire and brazed tubing, braziers' sheet copper, soft and cold-rolled copper anodes, brush copper for electrical purposes, German-silver sheet, rod and wire are also carried in stock. Their new store building on Clinton street is progressing rapidly and will give them over double the space of their present five-story building.

Unusually Busy.—The Louisiana branch of the Lukens Iron & Steel Co., 630-634 South Peters street, New Orleans, La., reports a more than usually busy season even for this time in the year. In addition to the large assortment of iron and steel, during the past year has been added a complete line of structural material. Valuable property has been purchased, and both the beamhouse and warehouse have been equipped throughout with modern appliances for the fast and safe handling of stock. The New Orleans branch is a comparatively young concern, but the mills in Cotesville, Pa., are said to have been working for nearly a century. Mr. James W. Porch is manager of the New Orleans office and branch.

Gas-power Development.—The gas-engine central station is assuming material form in several recent projects for the utilization of gas fuel for power and lighting purposes. A complete equipment of gas generators, gas engines and direct-connected generators is in process of installation in several important American industrial establishments, viz.: The Winchester Repeating Arms Co., New Haven, Conn.; the Atlantic Refining Co., Philadelphia, Pa.; the Consolidated Industries Co., Batavia, N. Y., and the Rockland Electric Co., Hillburn, N. Y. These installations should prove of interest to gas engineers and manufacturers in general as representative of advancement in the field of power development. The machinery will be furnished by Westinghouse, Church, Kerr & Co., engineers, New York.

Vaults.—The contract for a 100-ton vault to be placed in the New Century Building, corner Alabama and Whitehall streets, Atlanta, Ga., containing safety-deposit boxes, etc., and costing nearly \$30,000, has been let to the York Safe & Lock Co., York, Pa. This is one of the largest of its kind in the South. The combination time locks and combinations of this vault cost many thousands of dollars. Fielder & Allen Company, general agent for the York people, is very much pleased over landing such a large contract. In the past two years over \$100,000 worth of safes and vaults of York make have been placed in Atlanta alone. The Third National Bank is equipped with vaults and fixtures sold by Fielder & Allen Company. This firm is one of the largest of its kind in the South, and by its progressive business methods is winning wide Southern patronage.

TRADE LITERATURE.

Engines.—The Buffalo Forge Co., Buffalo, is distributing a very attractively-arranged catalogue in a very unique cover, describing and illustrating engines, of which it is an extensive maker. These engines are simple, durable and with high steam economy. Interested parties may receive the catalogue upon request.

Roofing.—J. A. & W. Bird & Co., Boston, Mass., makers of Flintkote roofing, are mailing an interesting mailing card advertising this brand of their products. The letters A, B, C and F, and what this firm interprets them to stand for, are worked into a four-line verse. Those who have used this roofing are said to have found it satisfactory.

Shelby Arc Lamps.—Interesting facts about the Shelby arc lamps are contained in a little book just received from its maker, the Shelby Electric Co., Shelby, Ohio. The book is filled with "because" and illustrations showing why Shelby lamps utilize all the current possible to the production of light, with very little waste. The reasons and the illustrations are convincing.

Shipping Tag.—The Electric Supply Co., Savannah, Ga., has an odd mailing card, which is now being distributed. This is the exact shape and size of the ordinary shipping tag with the exception of the space for name and address. On one side is given the

information that this firm has Fostoria lamps in barrel lots for sale. On the reverse side the picture of the lamp is printed. Freight is paid on all shipments from this factory.

Machine Tools.—The American Tool Works Co., designer and builder of machine tools, Cincinnati, is mailing a very attractive little Thanksgiving souvenir calendar for November, handsomely designed and colored, with a neat photograph of a lathe in the center and a shaper on the reverse side. A folder of planers, shapers, lathes, radials, etc., is also contained in the envelope. This is good printing, illustrating and describing good machinery.

Testimonials.—Roofing, paving, paint and insulating materials manufactured by the Trinidad Asphalt Manufacturing Co., St. Louis, are effectively advertised in a book just received from this firm. This is largely made up of testimonials and photographs of buildings on which these products are and in many instances have been for years used. The products of the Trinidad Company have a wide reputation, and have long enjoyed it, for being in every way most satisfactory.

New Calendar.—The Wolf Company, Chambersburg, Pa., is mailing a souvenir calendar for 1903 which is attractively gotten up. A pretty face looks out from the center of a cluster of red flowers; a small calendar is fastened unobtrusively above, concealed in the leaves of which is the only advertising matter the calendar contains. The Wolf Company enjoys an excellent reputation for the quality of its flouring-mill and power-transmitting machinery.

Refrigeration.—A folder issued to call attention to the Brown-Cochran Company, Lorain, Ohio, and to some of its lines of manufacture, has been received from that firm. These lines embrace the Brown gas engine, an extensive and excellent line of ice-making and refrigerating machinery and economical compressors for every service. The little book fulfils very well what it is sent out to accomplish, and is an attractive piece of printed matter besides. It is short and well written.

Additional List.—The Waterbury Brass Co., 122 to 130 Center street, New York, is issuing several sheets noting certain recent additions to its stock not heretofore listed. This stock in New York alone amounts to more than 1,000,000 pounds of brass, copper and bronze in seamless and brazed tubing, brass, copper and German silver in sheets, wire and rods, and non-corrosive Pope's Island white metal. These sheets give information about special sizes and shapes of hard sawed brass bars, brass and copper bronze round rods, etc.

Nernst Lamps.—The problem of properly distributing artificial light is perhaps of greater importance than supplying it in sufficient quantities. More eyes are probably ruined by badly-distributed light and light of poor quality than lack of a sufficient quantity of it. These facts have led the engineers of the Nernst Lamp Co., Pittsburgh, to study carefully the problems of correct distribution of light. Their conclusions are incorporated in the little book just received from this firm.

Lath Machines.—It is obviously impossible to make a good lath, or, in fact, a good anything that must be machine made, with poor machinery. Wm. E. Hill & Co., Kalamazoo, Mich., reasoned in this way and perfected the lath machines so completely described in a catalogue just received from them. The firm asserts that all the machinery sold by it is designed and built on the principle that the best is none too good for men desiring superior products. It is apparent that the printed matter issued by this firm is designed with the same idea in view.

Blue-printing.—It is not unusual to hear of cases where important drawings and other work could not be copied because of a spell of cloudy weather preventing the blue-printing department from continuing their work. Recognizing the importance of some reliable and efficient means of making blue-printing independent of the weather, the Pittsburgh Blue Print Co., 1505 Park Building, Pittsburgh, Pa., perfected a patent cylindrical electric copier, and has already installed over 100 of these in the offices of some of the largest concerns in the country. The booklet now being issued descriptive of this device is an interesting one.

Mr. George R. Webb has resigned as a director and vice-president of the United Railways & Electric Co. of Baltimore, and is devoting his attention to his telephone interests.

OIL FOR THE NAVY.

A Report Upon Experiments Tried at Washington.

A dispatch from Washington embodying the main features of the report by Rear Admiral George W. Melville, engineer-in-chief of the Navy, regarding the use of petroleum as a substitute for coal in the Navy, says that the details of the report, while of great interest to special classes, are summed up for the public, as far as the Navy is concerned, as follows:

"The more this question is investigated the more intricate seems the problem of successfully installing an oil-fuel appliance on board a battleship. It ought to be successfully used on the torpedo-boats, as well as upon auxiliary naval vessels that steam between regular ports. For the army transport service it might prove very desirable, since a supply of oil could be maintained at the several calling ports.

In regard to the installation on the large powered battleships and armored cruisers, there are three distinct features which must be considered, viz., the mechanical, the commercial and the structural. Regarded from two of these points of view, it seems as if it would be some time before 'coaling ships' ceases to be an evolution upon the war vessel. While both the naval and mercantile vessel traverse the ocean, there is a wide difference in their construction, as well as in the nature of the duty performed, and this must be taken into account in designing the motive plant."

The first line of inquiry by the board was the engineering or mechanical feature, involving the possibility of successfully burning oil for steam purposes, and it is said that this problem is nearing solution. It has been found necessary to atomize the oil (it cannot be completely gasified), instead of using it without pressure. The air blast should be heated by some simple device. If this is done properly the experiments have shown that it will be possible to force the combustion of oil to the same extent as coal, something not done before, but essential for naval uses.

Treating of the commercial aspects of the question, the report makes the following important statements:

"It may be regarded as a certainty that, except where unusual conditions prevail, the cost of oil for marine purposes will generally be greater than that of coal. The cost may be less for vessels departing from the Gulf and California seaports, but the rule will hold elsewhere. While the question of cost should be of secondary importance in military matters, it must be taken into consideration. It is the expense of transportation that will always prevent the oil from being a cheap combustible. While it may be put on the tank steamer very cheaply at ports like Point Sabine, its commercial value will be determined by the cost of delivery at commercial and maritime centers. This feature of the problem is beyond the ability of the Navy to control, but it must be regarded as an important phase of the subject."

It is then shown that it would be more expensive and difficult to store oil than coal, and that the fumes are dangerous in places like the small bunkers and double-bottom spaces aboard ship, where, being heavy, they cannot be easily blown away. But in spite of these and other objections the report says:

"The bureau has no hesitation, however, in declaring that, in view of the results already secured by the liquid fuel board, an installation should be effected without delay on at least a third of the torpedo-boats and destroyers. The junior officers of the service are very much interested in the matter, and if several boats

are equipped entirely with oil-fuel appliances a spirited and keen but friendly rivalry will be created which will result in a material increase in the efficiency of the torpedo-boat flotilla. Such an installation would also permit a competition to be established between the boats using coal and those using oil, and this would be another incentive to cause systematic and careful study of the subject upon the part of all connected with the torpedo fleet."

Georgia Cane Syrup.

Referring to the application by Judge Joseph Tillman of Quitman, Ga., for a patent of his process for making sugar-cane syrup, the Savannah News says:

"Judge Tillman, although he has spent many years of his life in calling attention to the rich agricultural resources of South Georgia and Florida, is still earnestly and actively working to promote the welfare of that section.

"It is a safe assertion that Judge Tillman has done more for South Georgia than any other of its citizens. He has always contended, and still contends, that it is capable of being made one of the richest sections of the country. He has pointed out, time and time again, that its resources are very great, and that its possibilities are almost without limit. It has been his effort to make South Georgia farmers and people outside of South Georgia understand and appreciate these resources.

"He is beginning to see results from his patient and intelligent work. When he began to write about the possibilities of wealth there were in the growing of sugar-cane in South Georgia and Florida for making syrup the output of syrup was comparatively small, and the quality of it was so indifferent that it did not command more than eleven to fifteen cents per gallon. Now there are farmers who make annually hundreds of barrels of the syrup, and they get forty to fifty cents a gallon for it.

"This is something to be proud of. There are very few Georgians who have done as much for their State. It is doubtful if any one of them can say that he has added so much to the State's wealth.

"And this new process for making syrup promises to be a great boon to the farmers of South Georgia and Florida. The opinion is expressed that it will enable the syrup producers to get as much as a dollar a gallon for the product of their cane fields. If such should prove to be the case, it will not be many years before South Georgia will be by far the richest part of the State. The pine lands which, not so many years ago, were thought to be practically worthless when denuded of their pine trees, will yield every year crops having a value greater than was that of their lumber and naval stores. Indeed, even now the once despised pine lands are producing the bulk of the crop of long-staple cotton, and, as already stated, their output of cane syrup is giving an air of prosperity to all South Georgia. As Judge Tillman, from his home in Quitman, views the results of his efforts, he has reason to think that his life has not been a failure—that he is entitled to be regarded as one of the great benefactors of his State."

It is announced that the Newport News Shipbuilding & Dry-Dock Co. will submit a bid for at least one of the two new armored cruisers, the Tennessee and the Washington. The bids are to be opened in January. Each of the vessels is to cost \$6,000,000 when completed.

During the past year permits for new buildings aggregating in value a quarter of a million dollars have been granted at Macon, Ga.

FINANCIAL NEWS.

The Manufacturers' Record invites information about Southern financial matters, items of news about new institutions, dividends declared, securities to be issued, openings for new banks, and general discussions of financial subjects bearing upon Southern matters.

Review of the Baltimore Market.

Office Manufacturers' Record,
Baltimore, Md., November 19.

The Baltimore stock market during the past week was materially affected by the continued depression in New York, which was reflected here, particularly in the activity and decline of Seaboard Railway common stock, in which there was considerable trading, but the preferred shares were only moderately represented in the dealings. Outside of Seaboard there was little to occupy the attention of traders, but a little movement in the securities of the United Light & Power Co. displayed itself in consequence of the closing of the deal for its sale to a syndicate. These issues remained about steady, as were also the stock and bonds of the United Railways & Electric Co. Consolidated Gas showed little movement, and Cotton Duck issues were also quiet, together with the securities of the G. B. S. Brewing Co. Trust and fidelity shares cut more of a figure in the market than they have done of late, but the dealings in them were not large. Bank shares remained quiet. Investment securities continued in fair demand, and toward the end of the period dullness prevailed, but with a better tone.

In trading Seaboard common started at 26½, declined to 25½, rose to 26, fell to 25, advanced again fractionally, and then dropped to 24½, the lowest point reached for a long time; after this there was a gradual recovery to 26½, from which point there was a reaction to 25½, followed by a rise to 26½. The preferred stock started at 45½, dropped to 43½, and then reacted to 45, after which there was a fractional decline to 44½. The 4 per cent. bonds sold between 83½ and 84½, and the 5 per cents between 101 and 101½. United Railways common was traded in between 13½ and 13¾, the income bonds between 67½ and 68¼, and the 4 per cents between 94½ and 95. Light & Power preferred changed hands from 38½ to 39, and the 4½ per cent. bonds from 84 to 84½. Consolidated Gas sold at 72½, and ex-dividend from 71¼ down to 70½, recovering to 71. The 5 per cent. bonds sold at 114½; Cotton Duck common at 8, the income bonds at 39 and 39½, and the 5 per cents at 77 and 78. G. B. S. common was traded in at 12¼ and 13, the incomes at 37 and 37½, and the 1sts at 49 to 50.

International Trust sold at 145, reacted to 143, rose to 145 and again sold down to 143. Central Trust changed hands at 57; Continental at 210; Mercantile at 165, and Union at 72½. Fidelity & Deposit sold at from 159½ up to 163; United States Fidelity & Guaranty from 148 down to 145½, and then reacted to 149. Maryland Casualty was dealt in at 54. Maryland National Bank sold at 18; National Union at 118, and Farmers and Merchants' at 70.

Other securities dealt in were as follows: Northern Central 6s, 132½; Georgia Southern & Florida 5s, 115½ and 116; Nashville Railway common, 3½ and 3½; the 5s, certificates, first instalment paid, 64 and 64½; Georgia & Alabama Consolidated 5s, 111½ and 112; Atlanta Street Railway 5s, 106½ and 106¼. Atlantic Coast Line common changed hands at from 165 down to 158; Norfolk Railway & Light at 13; Philadelphia Company, 46½; Canton Company, 100; Alabama Consolidated Coal & Iron common,

38; Georgia, Carolina & Northern 5s, 112½; Raleigh & Augusta 6s, 125½; Charleston Street Railway 5s, 100½; Atlanta & Charlotte 1sts, 113½; Charleston & Western Carolina 5s, 114; Lexington Street Railway 5s, 104½; Atlantic Coast Line of Connecticut 5s, certificates, 117; Virginia Midland 4ths, 110; South Bound 5s, 110½; Baltimore City 3½s, 1930, 111½; Atlantic Coast Line 4s, S. C., 103½; Carolina Central 4s, 98¼; Newport News & Old Point 5s, 107½, and Petersburg Class A 5s, 118.

SECURITIES AT BALTIMORE.

Last Quotations for the Week Ended
November 19, 1902.

Railroad Stocks.	Par.	Bid.	Asked
Atlanta & Charlotte.....	100	85	170
Georgia Sou. & Fla. 2d Pref.....	100	80	81
United Railways & Elec. Co.....	50	134	14
Seaboard Railway Common.....	100	26½	26¾
Seaboard Railway Preferred.....	100	44½	45

Bank Stocks.	Par.	Bid.	Asked
Citizens' National Bank.....	10	33	
Commercial & Far. Nat. Bank.....	100	125	140
Farmers & Mer. Nat. Bank.....	40	70	70½
First National Bank.....	100	165	175
German Bank.....	100	108	
German-American Bank.....	100	105	195
Manufacturers' National Bk.....	100	100	105
Merchants' National Bank.....	100	105	
National Bank of Baltimore.....	100	125	126
National Exchange Bank.....	100	194	
National Howard Bank.....	10	113	
National Marine Bank.....	30	37	
National Mechanics' Bank.....	10	31¼	32¼
National Union Bank of Md.....	100	117	118
Second National Bank.....	100	185	
Third National Bank.....	100	133	
Western National Bank.....	20	40	

Trust, Fidelity and Casualty Stocks.	Par.	Bid.	Asked
American Bonding & Trust.....	50	80	82½
Baltimore Trust & Guarantee.....	100	305	320
Central Real Estate & Trust.....	50	57	60
Colonial Trust.....	50	29	35
Continental Trust.....	100	212	212
Fidelity & Deposit.....	50	163	165
International Trust.....	100	143	
Maryland Casualty.....	25	54¼	
Maryland Trust.....	100	210	
Mercantile Trust & Deposit.....	50	165	169
Union Trust.....	50	72	
U. S. Fidelity & Guaranty.....	100	149	149½

Miscellaneous Stocks.	Par.	Bid.	Asked
G. B. S. Brewing Co.....	100	12	12½
United Elec. L. & P. Pref.....	50	38½	40
Cotton Duck Voting Trust.....	100	6½	8
Consolidated Coal.....	100	110	116
Georgia's Creek Coal.....	100	110	116
Consolidated Gas.....	100	71	71½

Railroad Bonds.	Par.	Bid.	Asked
Atlanta & Charlotte 1st 7s, 1907.....	112½	113½	
Georgia, Car. & North, 1st 5s, 1929.....	111½	113	
Georgia South. & Fla. 1st 5s, 1945.....	116		
Georgia Pacific 1st 6s, 1922.....	126½		
Raleigh & Augusta 1st 6s, 1926.....	125	125½	
Richmond & Danville Gold 6s, 1915.....	121		
Southern Railway Con. 5s, 1904.....	118		
Virginia Midland 4th 3-4-5s, 1921.....	113½		
Virginia Midland 5th 5s, 1926.....	114½	115½	
W. & N. Carolina Con. 5s, 1914.....	118½	119½	
West Virginia Central 1st 6s, 1911.....	114½		
Wilmington, Col. & Aug. 6s, 1910.....	114		
Wilmington & Wel. Gold 5s, 1935.....	120		
Charleston City Railway 5s, 1923.....	106½		
Charleston Con. Electric 5s, 1909.....	91½		
Knoxville Traction 1st 5s, 1928.....	100		
Newport News & Old Pt. 5s, 1938.....	108½		
Norfolk Street Railway 5s, 1944.....	112	115	
United Railways 1st 4s, 1949.....	94½	95	
United Railways Inc. 4s, 1949.....	88	88½	
Seaboard 4s.....	83½	84	
Seaboard 10-year 5s.....	101½	101½	
Georgia & Alabama Con. 5s.....	111	112	
South Bound 5s.....	110½	111	
Atlanta Street Railway 5s.....	106½		
Char. & W. Car. 5s.....	113½	114	

Miscellaneous Bonds.	Par.	Bid.	Asked
Mt. V. & Woodb'y Cot. Duck 5s.....	78		
Mt. V. & Woodb'y Cot. Duck Inc.....	39¼	40	
G. B. S. Brewing 1st 3-4s.....	49½	49½	
G. B. S. Brewing 2d 1s.....	26½	27½	
United Elec. Light & Power 4½s.....	84		
Consolidated Gas 6s, 1919.....	113		
Consolidated Gas 5s, 1929.....	114½	114½	

SOUTHERN COTTON MILL STOCKS

Quotations Furnished by Hugh MacRae & Co., Wilmington, N. C., for
Week Ending November 18.

	Bid.	Asked
Abbeville Cotton Mills (S. C.).....	76	
Alken Mfg. Co. (S. C.).....	88	93
Anderson Cotton Mills (S. C.).....	123	128
Arkwright Mills (S. C.).....	115	125
Augusta Factory (Ga.).....	62	
Avondale Mills (Ala.).....	85	
Bibb Mfg. Co. (Ga.).....	110	
Bennettsville Mfg. Co. (S. C.).....	80	
Brandon Mills (S. C.).....	95	101
Buffalo Cotton Mills (S. C.).....	100	
Cabarrus Cotton Mills (N. C.).....	122	
Clearwater Bchy. & Mfg. Co. (Ga.).....	104	
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